

**MODEL W1813**  
**18" OPEN END WIDE BELT**  
**SANDER**



**OWNER'S MANUAL**

**Phone: (360) 734-3482 • Online Technical Support: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz)**

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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT**  
**THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.**



# **WARNING!**

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



# **WARNING!**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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# INTRODUCTION

## Woodstock Technical Support

This machine has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.

We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz). Our knowledgeable staff will help you troubleshoot problems and process warranty claims.

## Machine Overview

An open end wide belt sander is designed to surface sand a workpiece that is twice the width of the sander's capacity by rotating the workpiece 180° for the second and subsequent sanding passes.

The operator uses the elevation handwheel and scale to set the depth of cut, turns the sanding and conveyor motors **ON**, sets the feed rate or speed of the conveyor belt, then feeds the workpiece into the sander at the same rate as the conveyor. Pressure rollers keep the workpiece held to the conveyor belt to move it under the sanding drum. After each pass, the operator lowers the sanding belt the recommended amount and feeds the workpiece through the sander again.

The oscillation system shifts the sanding belt from side-to-side on the sanding drum to produce an even sanding finish across the width of the workpiece. This system is operated with compressed air through a series of air valves and levers. The sanding motor brake unit also requires compressed air, which brings the sanding motor and sanding belt to a quick stop when the power is turned **OFF**.

The depth of cut safety bar prevents a workpiece that is too high from being "jammed" into the sanding belt, which could produce an unsafe hazard of kickback. As well, the air pressure safety switch will not allow the machine to operate if the source of compressed air is below the operating minimum.

If you need the latest edition of this manual, you can download it from <http://www.shopfox.biz>.  
If you have comments about this manual, please contact us at:

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# Features

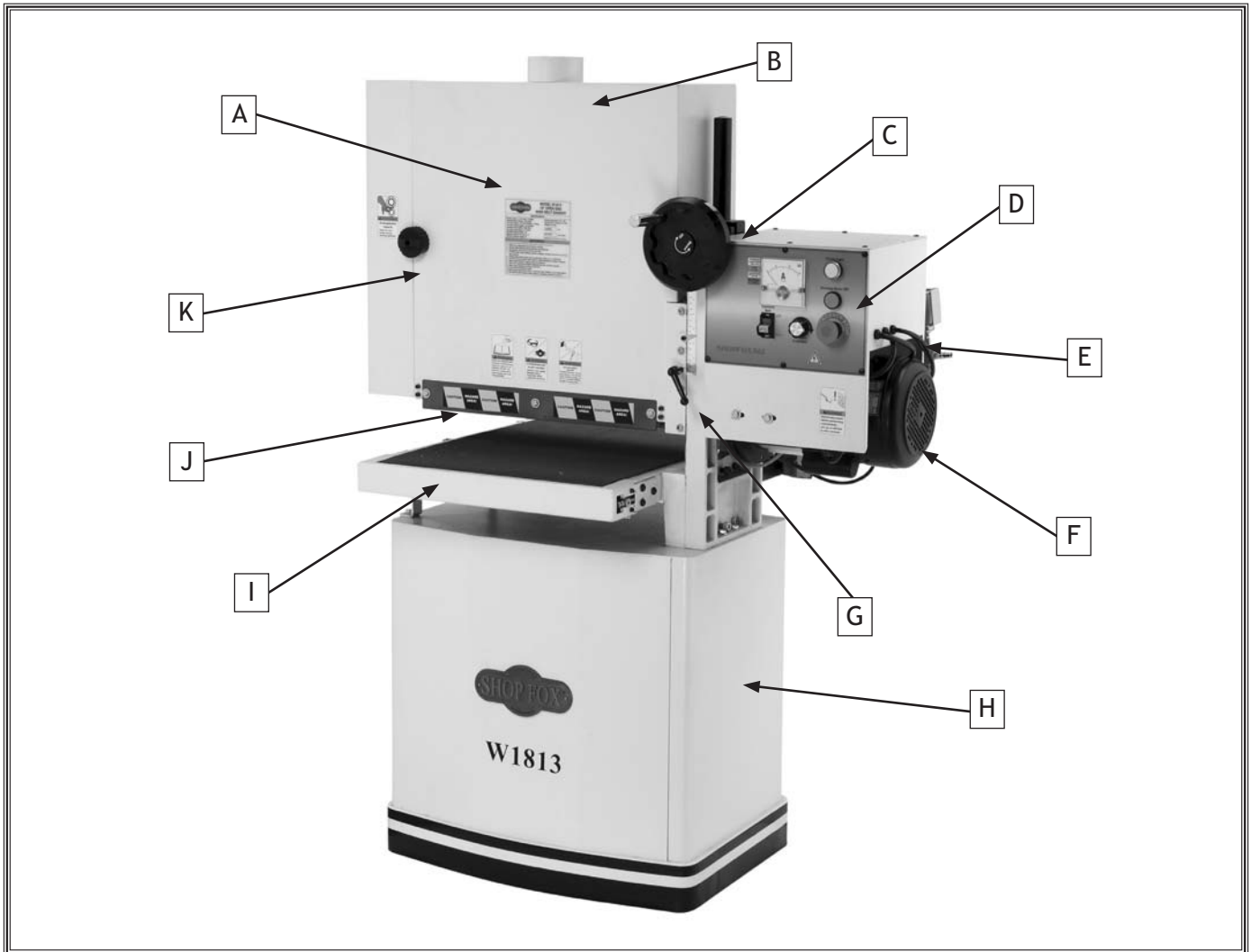


Figure 1. Model W1813 features.

- |  |                             |
|--|-----------------------------|
| A. Sanding Cabinet   | F. Motor 3 HP               |
| B. Dust Port 4"  | G. Elevation Lock Lever     |
| C. Elevation Handwheel   | H. Cabinet Stand            |
| D. Control Panel (refer to <b>Basic Controls</b> on <b>Page 19</b> for details) & Electrical Box | I. Conveyor                 |
| E. Air Regulator & Safety Switch   | J. Depth of Cut Safety Bar  |
|  | K. Sanding Belt Access Door |

# Controls

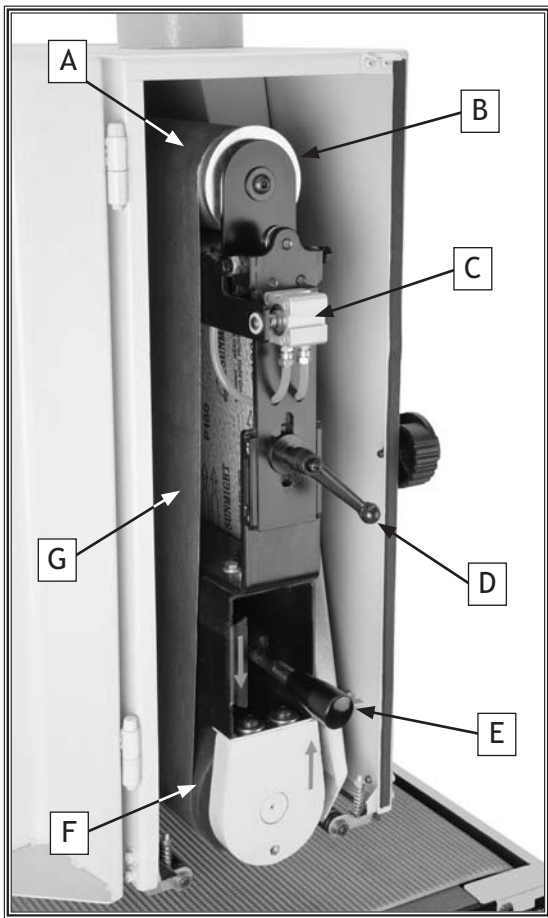


Figure 2. Sanding cabinet controls.

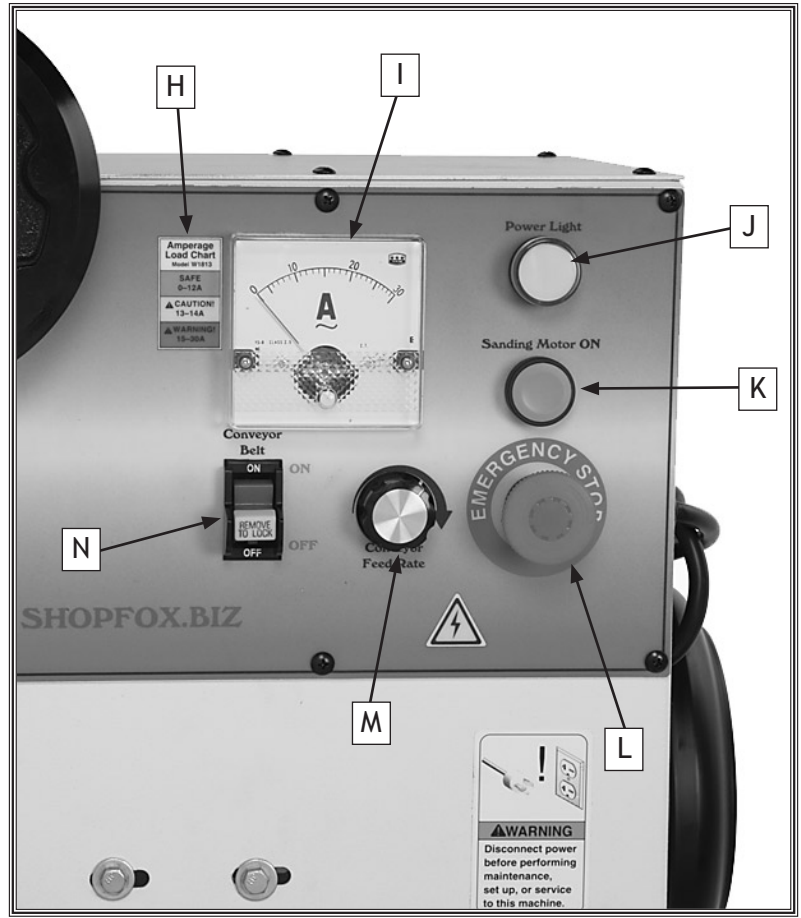


Figure 3. Control panel identification.

- A. Upper Roller
- B. Left Oscillation Disc
- C. Oscillation Control Valve
- D. Sanding Belt Tension Lock Lever
- E. Sanding Belt Tension Lever
- F. Sanding Drum
- G. Sanding Belt 19" x 48"

- H. Amperage Load Chart
- I. Amperage Load Meter
- J. Power Light
- K. Sanding Motor ON Button
- L. Emergency Stop Button
- M. Conveyor Feed Rate Dial
- N. Conveyor ON/OFF Switch w/Disabling Key



# MACHINE SPECIFICATIONS



Phone #: (360) 734-3482 • Online Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz

## MODEL W1813 18" OPEN-END WIDE BELT SANDER

### Product Dimensions:

Weight .....	475 lbs.
Length/Width/Height .....	42 <sup>1</sup> / <sub>2</sub> " x 24" x 62 <sup>1</sup> / <sub>2</sub> "
Foot Print (Length/Width).....	25" x 17 <sup>1</sup> / <sub>2</sub> "

### Shipping Dimensions:

#### Box 1

Type .....	Wood Pallet + Cardboard
Content .....	Machine
Weight.....	470 lbs.
Length/Width/Height.....	47" x 26" x 39"

#### Box 2

Type .....	Cardboard
Content .....	Stand
Weight.....	92 lbs.
Length/Width/Height.....	19" x 27" x 26"

### Electrical:

Switch .....	Magnetic Switch with Thermal Overload
Switch Voltage .....	220V
Cord Length.....	6 <sup>1</sup> / <sub>2</sub> ft.
Cord Gauge .....	14 gauge
Recommended Circuit Size .....	20A
Plug .....	No

### Motors:

#### Sanding Drum

Type .....	TEFC Capacitor Start Induction
Horsepower .....	3 HP
Voltage.....	220VAC
Phase .....	Single
Amps .....	14A
Speed.....	1725 RPM
Cycle .....	60 Hz
Number Of Speeds .....	1
Power Transfer.....	Direct Drive
Bearings.....	Sealed and Lubricated



**Conveyor Feed**

Type .....	Direct Current Variable Speed
Horsepower .....	<sup>1</sup> / <sub>10</sub> HP
Voltage .....	220VDC
Phase .....	Single
Amps .....	1A
Number of Speeds .....	Variable
Speed .....	10-34 RPM
Cycle .....	60 Hz
Power Transfer .....	Gearbox
Bearings .....	Sealed and Lubricated

**Main Specifications**

**Operation Information**

Number of Sanding Drums .....	1
Maximum Board Width .....	18"
Minimum Board Width .....	2"
Maximum Board Thickness .....	6"
Minimum Board Thickness .....	<sup>1</sup> / <sub>4</sub> "
Minimum Board Length .....	6"
Sanding Drum Speed .....	1850 FPM
Sanding Drum Diameter .....	4"
Conveyor Feed Rate .....	5-17 FPM
Sandpaper Length .....	48"
Sandpaper Width .....	19"

**Sanding Drum Information**

Drum Type .....	Rubber
Drum Diameter .....	4"

**Construction Information**

Conveyor Belt .....	Heavy-Duty Rubber
Body .....	Steel
Paint .....	Powder Coat
Table and Column .....	Cast Iron
Cabinet Stand .....	Steel

**Other Information**

Number of Pressure Rollers .....	2
Pressure Roller Type .....	Steel
Pressure Roller Diameter .....	<sup>3</sup> / <sub>4</sub> "
Number of Dust Ports .....	1
Dust Port Size .....	4"

**Other Specifications:**

Country of Origin .....	Taiwan
Warranty .....	2 Year
Serial Number Location .....	ID Label on Front
Assembly Time .....	1 Hour
Required Air Pressure .....	57 PSI

**Features:**

- Variable Speed Conveyor Feed
- Pneumatic Belt Tracking
- Emergency Brake System
- Spring Belt Tensioning System
- Amp Load Meter



# SAFETY

**READ MANUAL BEFORE OPERATING MACHINE.  
FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL  
RESULT IN PERSONAL INJURY.**

**⚠ DANGER** Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

**⚠ WARNING** Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

**⚠ CAUTION** Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury.

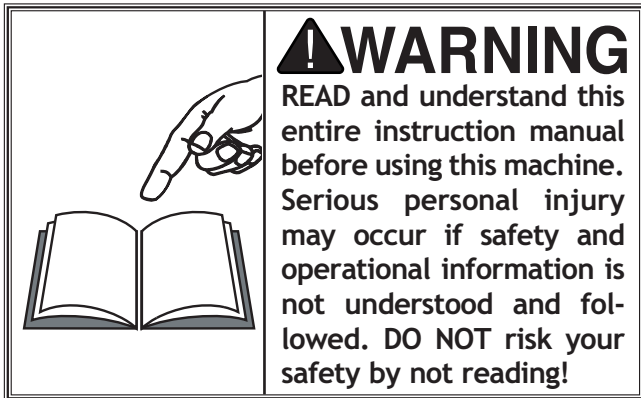
**NOTICE** This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

## Standard Safety Instructions

1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eye-glasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.
7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power **OFF** and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery **ON**.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

## Additional Safety for Wide Belt Sanders



1. **KICKBACK.** Kickback is typically defined as the high-speed expulsion of stock from the machine, which can cause serious personal injury to the operator or bystanders. *Until you have a clear understanding how kickback can occur when using this machine, DO NOT operate this sander!*
2. **WORKPIECE FEED RATE.** Forcing or jamming the workpiece into the sander or against the sanding belt can cause it to kickback into the operator. Always use the correct depth of cut, then firmly hold the workpiece and ease it into the sander at the same feed rate as the conveyor.
3. **AVOIDING ENTANGLEMENT.** Becoming entangled in the moving parts of this machine can cause pinching and crushing injuries. To avoid these hazards, **DO NOT** wear loose clothing, gloves, or jewelry, and tie back long hair. Keep all guards in place and cabinet doors closed and secure.
4. **HAND PLACEMENT.** The sanding belt can remove a large amount of flesh in a few seconds. Always keep hands away from the sanding belt. Avoid pinching injuries by never putting your hand between the workpiece and the machine.
5. **UNATTENDED MACHINE.** This machine represents serious hazards to an untrained operator. Always turn the machine **OFF** and remove the conveyor belt disabling key before leaving the machine.
6. **WORKPIECE QUANTITY.** Never sand two or more workpieces side-by-side. Since workpieces are never exactly the same thickness, one of them may be thrown from the sander at a high rate of speed and could cause serious personal injury.
7. **WORKPIECE INSPECTION.** Nails, staples, knots, or other imperfections in the workpiece can be dislodged and thrown from the sander at a high rate of speed into the operator or bystanders. Never attempt to sand stock that has imperfections or embedded foreign objects.
8. **BODY PLACEMENT.** In case of kickback, avoid personal injury by always keeping your body to the side of the sanding path.
9. **POWER DISCONNECT.** Accidental start up or contact with live wiring could result in serious personal injury or death. Always disconnect the sander from power when changing the sanding belt, making adjustments, performing maintenance, or servicing the machine.

# ELECTRICAL

## ⚠️ WARNING

The machine must be properly set up before it is safe to operate. **DO NOT** connect this machine to the power source until instructed to do so in the "Test Run" portion of this manual.

## 220V Operation

The Model W1813 is wired for 220V single-phase operation. We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit size given below. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. This machine must be connected to a grounded circuit!

A plug is not supplied with this machine. See below for the recommended plug type for this machine.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire or circuit overload hazard—consult a qualified electrician to reduce this risk.

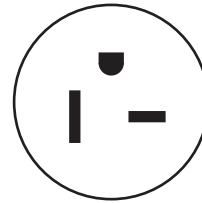
## Extension Cords

We do not recommend using an extension cord; however, if you have no alternative, use the following guidelines:

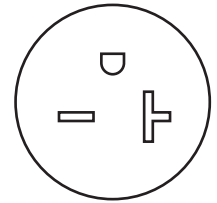
- Use a cord rated for Standard Service (S).
- Do not use an extension cord longer than 50 feet.
- Ensure that the cord has a ground wire and pin.
- Use the gauge size listed below as a minimum.

## Electrical Specifications

Operating Voltage	Amp Draw	Min. Circuit Size	Recommended Plug	Extension Cord
220V Operation	15 Amps	20A	NEMA 6-20 (not incl.)	12 Gauge



6-20P



6-20R

Figure 4. NEMA 6-20 plug and receptacle.

## ⚠️ WARNING



**DO NOT** work on your electrical system if you are unsure about electrical codes and wiring! Seek assistance from a qualified electrician. Ignoring this warning can cause electrocution, fire, or machine damage.

# SETUP

## Unpacking

This machine has been carefully packaged for safe transportation. If you notice the machine has been damaged during shipping, please contact your authorized Shop Fox dealer immediately.

## Inventory

The following is a description of the main components shipped with the Model W1813. Lay the components out to inventory them.

**Note:** *If you can't find an item on this list, check the mounting location on the machine or examine the packaging materials carefully. Occasionally we pre-install certain components for safer shipping.*

<b>Box 1 Inventory (Figure 5)</b>	<b>Qty</b>
A. Sander Assembly .....	1
B. Sanding Belt 19" x 48" (Pre-Installed) .....	1
C. Conveyor Front Guard (Pre-Installed) .....	1

<b>Box 2 Inventory (Figure 6)</b>	<b>Qty</b>
D. Cabinet Stand .....	1

<b>Hardware (not shown)</b>	<b>Qty</b>
– Machine Mounting Feet 3/8"-16 x 2" .....	4
– Hex Nuts 3/8"-16 (Mounting Feet) .....	4
– Flat Washers 3/8" (Mounting Feet) .....	8
– Hex Bolts M8-1.25 x 25 (Assembly-to-Stand) .....	4
– Flat Washers 8mm (Assembly-to-Stand) .....	4

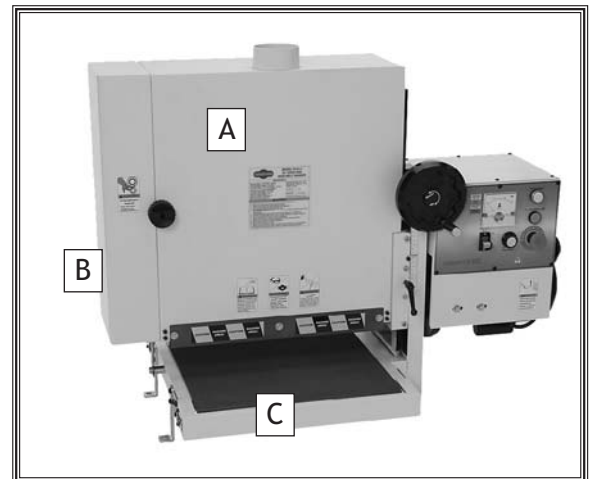
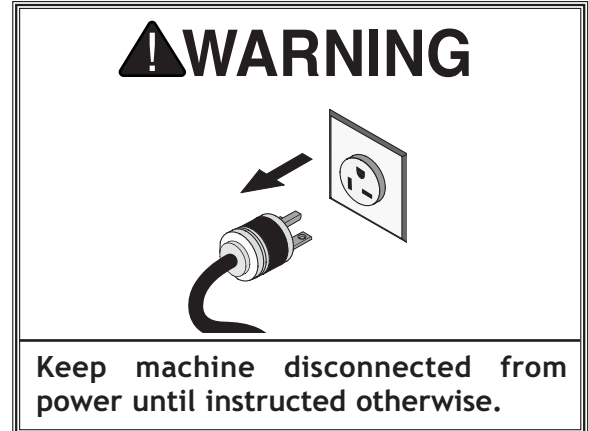


Figure 5. Model W1813 box 1 inventory.

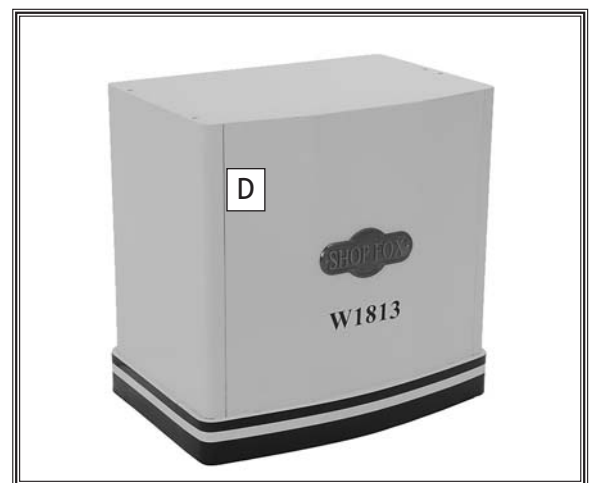


Figure 6. Model W1813 box 2 inventory.

SETUP

## Machine Placement

- **Floor Load:** This machine distributes a heavy load in a small footprint. Some residential floors may require additional bracing to support both machine and operator.
- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your wide belt sander.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.
- **Electrical:** Electrical circuits must be dedicated or large enough to handle amperage requirements. Outlets must be located near each machine, so power or extension cords are clear of high-traffic areas. Follow local electrical codes for proper installation of new lighting, outlets, or circuits.

## Cleaning Machine

The table and other unpainted parts of your wide belt sander are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. DO NOT use chlorine-based solvents such as brake parts cleaner or acetone—if you happen to splash some onto a painted surface, you will ruin the finish.

SETUP

	<p><b>⚠ WARNING</b> USE helpers and a fork lift rated for at least 750 lbs. to lift the sander assembly. Otherwise, serious personal injury may occur.</p>
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	<p><b>⚠ WARNING</b> NEVER clean with gasoline or other petroleum-based solvents. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!</p>
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	<p><b>⚠ CAUTION</b> MAKE your shop "child safe." Ensure that your workplace is inaccessible to children by closing and locking all entrances when you are away. NEVER allow untrained visitors in your shop when assembling, adjusting or operating equipment.</p>
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	<p><b>⚠ CAUTION</b> ALWAYS work in well-ventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they DO NOT create fire or environmental hazards.</p>
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# Moving & Assembly

Tools Needed	Qty
Wrench 1/2".....	1
Wrench 9/16".....	1
Precision Level .....	1

To move and assemble your wide belt sander, do these steps:

1. With assistance, turn the cabinet stand upside down on a protective piece of cardboard.
2. Place 3/8" flat washers on the mounting feet, then insert them through the machine mounting holes of the base (see Figure 7).
3. Reach into the cabinet and secure the feet with the 3/8" flat washers and 3/8"-16 hex nuts.
4. With assistance, turn the cabinet over and place it in the desired location.
5. Have your assistant steady the sander assembly as you place the forklift forks in a stable position under the conveyor, as shown in Figure 8.



**! WARNING**  
 USE helpers and a fork lift rated for at least 750 lbs. to lift the sander assembly. Otherwise, serious personal injury may occur.

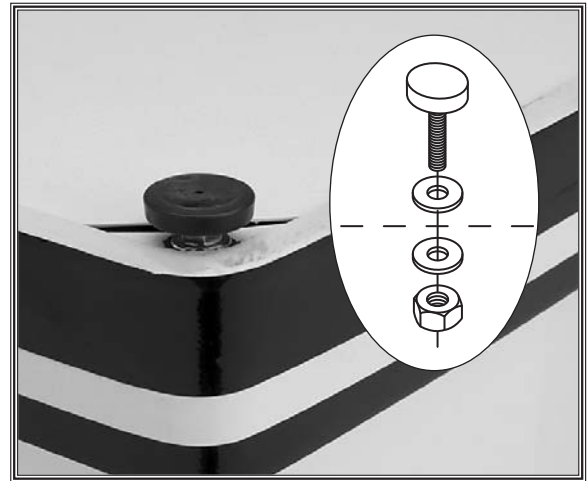


Figure 7. Mounting foot installed onto sanding cabinet.



Figure 8. Forklift forks properly positioned under the conveyor.

SETUP

6. Lift and move the sander assembly into position over the cabinet stand so that the mounting holes line up (see Figures 9-10).
7. Secure the sander assembly to the cabinet stand with the four M8-1.25 x 25 hex bolts and 8mm flat washers.
8. Open the sanding belt access door on the left side of the machine, and remove the red shipping brace securing the sanding drum to the conveyor assembly (see Figure 11).

## WARNING

Only use a forklift rated for at least 750 lbs. that is in good working condition. Use assistants to steady the load when lifting and moving the sander assembly. If the sander assembly should tip or fall, serious personal injury and property damage could result.

SETUP

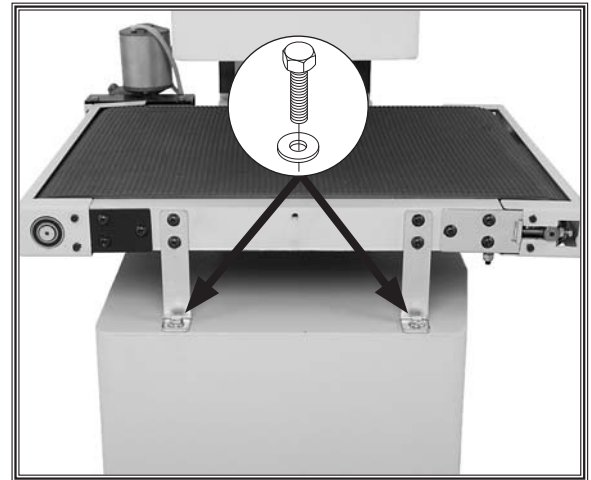


Figure 9. Sander assembly mounting points on left side.

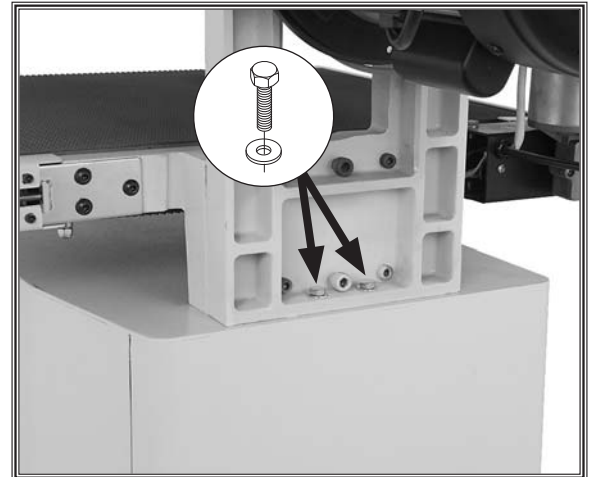


Figure 10. Sander assembly mounting points on right side.

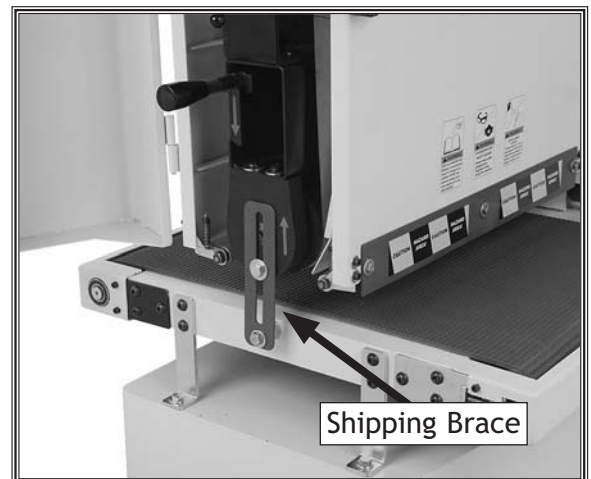


Figure 11. Shipping brace.



## Compressed Air

A steady supply of clean, dry air of 57-60 PSI (not to exceed 120 PSI) is required for the operation of the sanding belt oscillation system and pneumatic motor brake. Without the correct supply of compressed air, the machine will not start.

To connect and configure compressed air for the sander, do these steps:

1. Connect the source of compressed air to the air regulator inlet valve on the back of the machine (see **Figure 12**).
2. Lift up on the air regulator adjusting knob and turn it so that the air pressure dial reads 57-60 PSI, then push the adjusting knob down to lock the setting.

## Dust Collection

Recommended CFM at Dust Port: ..... 400 CFM

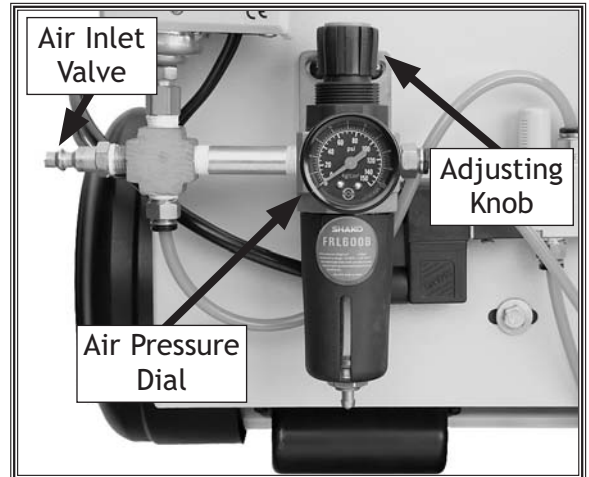
Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or Y's, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.

To connect the dust collection hose, do these steps:

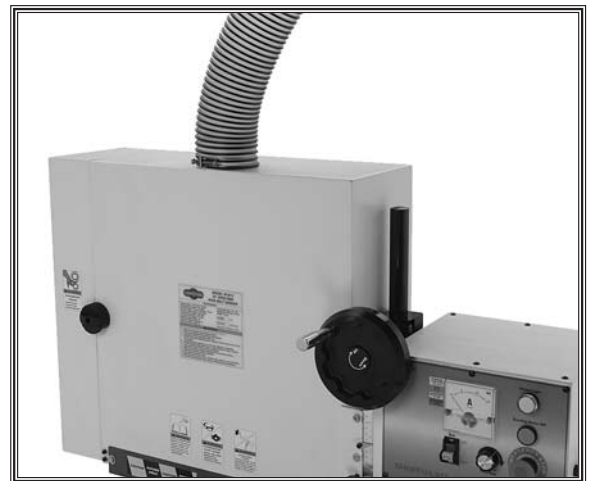
1. Fit a 4" dust hose over the dust port on top of the machine, as shown in **Figure 13**, and secure it in place with a hose clamp.
2. Tug the hose to make sure it does not come off. A tight fit is necessary for proper performance.

**⚠ CAUTION**

To avoid possible personal injury from exploding compressed air components or damage to the sander, never exceed 120 PSI of incoming compressed air to the mill's regulator.



**Figure 12.** Air regulator assembly on the back of the sander.



**Figure 13.** Dust hose connected to dust port.

**⚠ CAUTION**

**DO NOT** operate this machine without an adequate dust collection system. This machine creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

**SETUP**

## Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motors power up and run correctly, 2) the emergency stop button safety feature works correctly, 3) the conveyor ON/OFF switch disabling key works correctly, and 4) the air pressure safety switch operates properly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting on Page 45**.

If you still cannot remedy a problem, contact our Tech Support at (360) 734-3482 for assistance.

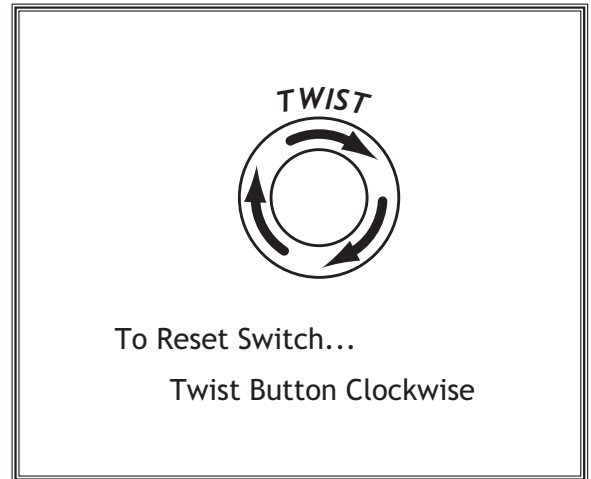


Figure 14. Resetting the switch.

### To test run the machine, follow these steps:

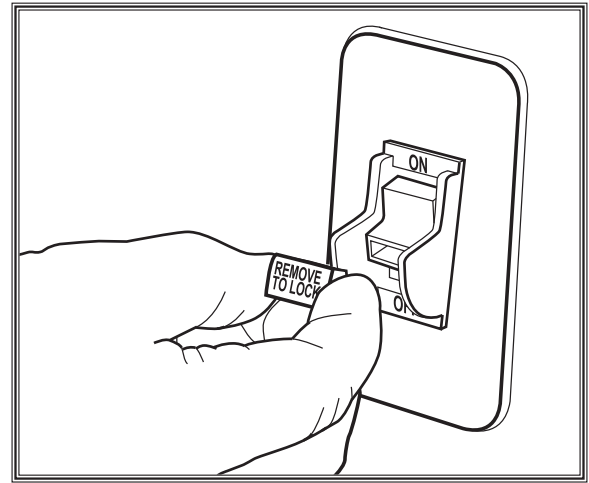
1. Make sure you understand the safety instructions at the beginning of the manual, and verify that the machine is set up properly.
2. Ensure all tools and objects used during setup are cleared away from the machine.
3. Connect the compressed air source to the machine (refer to **Compressed Air on Page 15** for detailed instructions).
4. Confirm the sanding belt is installed, properly tensioned (refer to **Sanding Belt Replacement on Page 20** for detailed instructions), and the sanding belt door is closed and secured.
5. Connect the machine to the power source—the power light on the control panel should light.
6. Push the emergency stop button in, then twist it clockwise so it pops out. When the emergency stop button pops out, the switch is reset and ready for operation (see **Figure 14**).
7. Push the sanding motor ON button to verify the machine starts and operates correctly.
  - When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.
  - Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always stop the machine and disconnect it from power before investigating or correcting potential problems.
8. Press the emergency stop button to turn the machine **OFF**.
9. WITHOUT resetting the switch, press the sanding motor ON button. The machine should not start.
  - If the machine does not start, the emergency stop button safety feature is working correctly.
  - If the machine does start (with the emergency stop button pushed in), immediately disconnect power to the machine. The emergency stop button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

**Note:** During the next step, you will hear a metallic "thump" when the sanding belt changes oscillation direction—this noise is normal.

10. Reset the emergency stop button, then turn the sanding motor **ON**.

**Note:** The sanding motor must be **ON** before the conveyor can be started.

11. Turn the conveyor **ON** and verify that it operates correctly—it should move from front-to-back. Use the conveyor feed rate dial to vary the speed.
12. Turn the conveyor **OFF**, then remove the switch disabling key, as shown in **Figure 15**.
13. Try to turn the conveyor **ON**.
  - If the conveyor does not start, the switch disabling feature is working as designed.
  - If the conveyor does start, immediately stop the machine and disconnect it from power. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with the regular operations. Call Tech Support for help.
14. Press the emergency stop button to turn the sanding motor **OFF**, re-install the switch disabling key, then reset the emergency stop button.
15. Disconnect the compressed air source from the sander and attempt to turn the sanding motor **ON**.
  - If the machine does not start, the air pressure safety switch is working correctly.
  - If the machine does start (with the compressed air source disconnected from the machine), immediately turn the machine **OFF** and disconnect it from power. The air pressure safety switch is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.
16. When all of the steps of the **Test Run** procedure have been successfully completed, your sander is ready for operation.



**Figure 15.** Removing the switch disabling key from the conveyor ON/OFF switch.

## Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory and no further setup is required to operate your machine.

However, because of the many variables involved with shipping, some of these adjustments may need to be repeated to ensure optimum results. Keep this in mind as you start to use your new machine.

Step-by-step instructions for these adjustments can be found in the **SERVICE** section of this manual.

- Conveyor Belt Tensioning (**Page 29**) & Tracking (**Page 30**).
- Gib Adjustment (**Page 31**).
- Sanding Drum & Conveyor Parallelism (**Page 32**).
- Air Pressure Safety Switch (**Page 34**).
- Depth of Cut Safety Bar Height (**Page 35**).
- Pressure Roller Adjustment (**Page 36**).

# OPERATIONS

## General

This machine will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

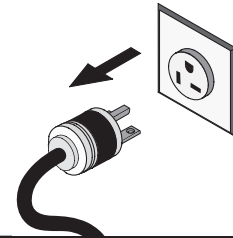
If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced *wide belt sander* operator before performing any unfamiliar operations. **Above all, your safety should come first!**

### WARNING



**READ** and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!

### WARNING



**DO NOT** investigate problems or adjust the machine while it is running. Wait until the machine is turned **OFF**, unplugged and all working parts have come to a complete stop before proceeding!

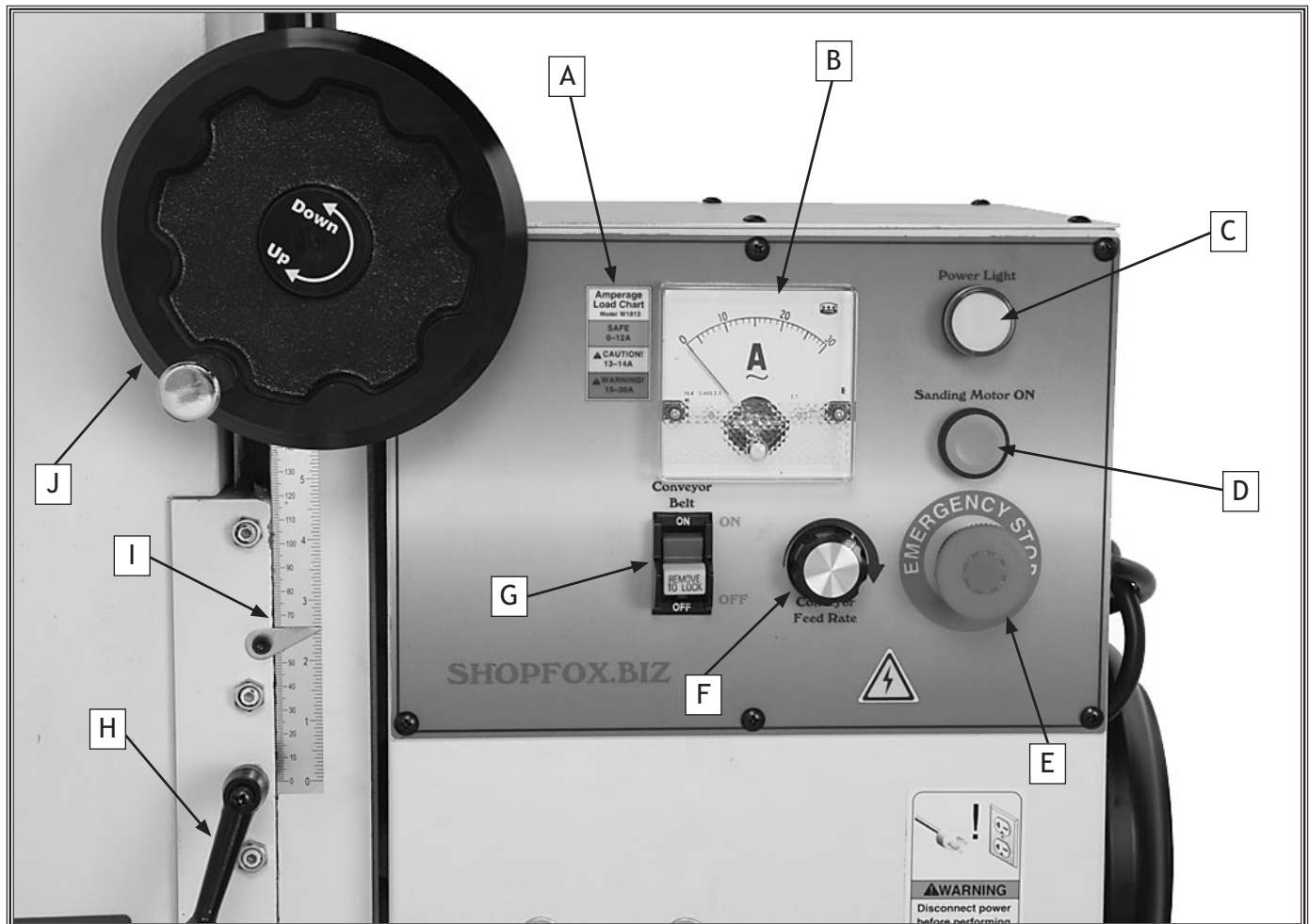
### WARNING



Always wear safety glasses and a respirator when operating this machine. Failure to comply may result in serious personal injury.

## Basic Controls

Refer to **Figure 16** and the following descriptions to become familiar with the basic controls of your sander.



**Figure 16.** Basic controls.

- A. Amperage Load Chart:** Displays the amperage range for safe operation of the sanding motor. NEVER operate the sander above the SAFE range!
- B. Amperage Load Meter:** Shows the amperage used by the sanding motor during operation.
- C. Power Light:** Lights when power is connected to the machine.
- D. Sanding Motor ON Button:** Starts the sanding motor when pressed.
- E. Emergency Stop Button:** Turns the sanding and conveyor motors **OFF**. This button does NOT disconnect the machine from power.
- F. Conveyor Feed Rate Dial:** Controls the feed rate of the conveyor between 5 and 17 feet per minute (FPM).
- G. Conveyor ON/OFF Switch w/Disabling Key:** Starts or stops the conveyor motor. Remove the key to disable the switch.
- H. Elevation Lock:** Locks the sander assembly in place above the conveyor after repositioning it with the elevation handwheel.
- I. Elevation Scale & Pointer:** Displays the height of the sanding drum above the conveyor.
- J. Elevation Handwheel:** Raises and lowers the sander assembly above the conveyor.



# Choosing Sandpaper

Sanding Belt Dimensions.....19"W x 48"L

There are many types of sanding belts to choose from. We recommend aluminum oxide for general workshop environments.

The grit you choose will depend on the type of operation, the species of wood, and the stage of finishing. As a general guideline, refer to the chart below to help you select the right grit for your operation.

Grit	Class	Usage
36	Extra Coarse	Rough sawn boards, thickness sanding, and glue removal.
60	Coarse	Thickness sanding and glue removal.
80-100	Medium	Removing planer marks and initial finish sanding.
120-180	Fine	Finish sanding.

The general rule of thumb is to sand a workpiece with progressively higher grit numbers, with no one grit increase of more than 50. Avoid skipping grits—the larger the grit increase, the harder it will be to remove the scratches from the previous grit.

**⚠ WARNING**

The moving parts inside the sanding cabinet represent a serious entanglement hazard. To avoid the risk of serious personal injury, always close and secure the sanding belt access door before starting the machine.

## Sanding Belt Replacement

To change the sanding belt, do these steps:

1. DISCONNECT THE SANDER FROM POWER!
2. Open the sanding belt access door and loosen the tension lock shown in **Figure 17**.

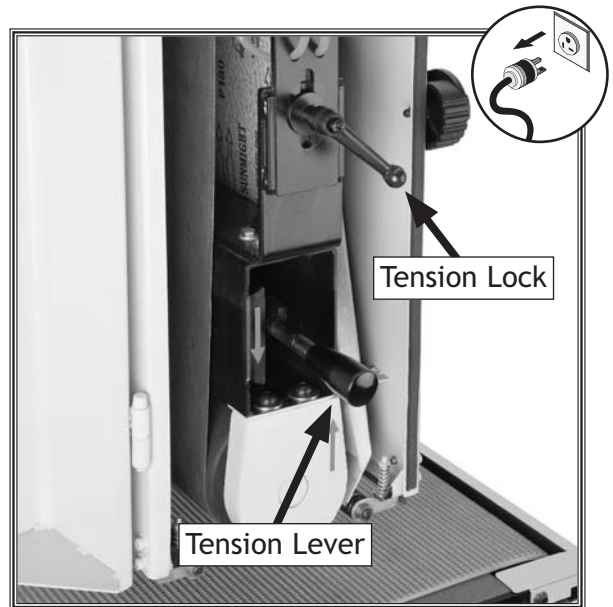


Figure 17. Sanding belt tension lock and lever.

OPERATIONS

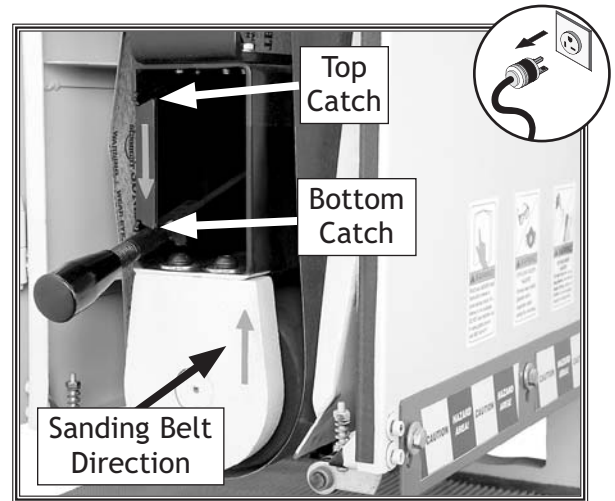
3. To release the tension on the sanding belt, move the tension lever up and to the right out of the top catch, then use moderate force to push it down and under the bottom catch, as shown in **Figure 18**.
4. Pull the sanding belt off the upper roller and the sanding drum.
5. Slide the new sanding belt onto the upper roller and sanding drum, then position it on the upper roller so that it is just past the left oscillation disc, as shown in **Figure 19**.

**Note:** Most sanding belts have arrows printed on their inside surface to indicate the direction of travel for the belt. Match these arrows with the sanding belt direction arrow shown in **Figure 18**.

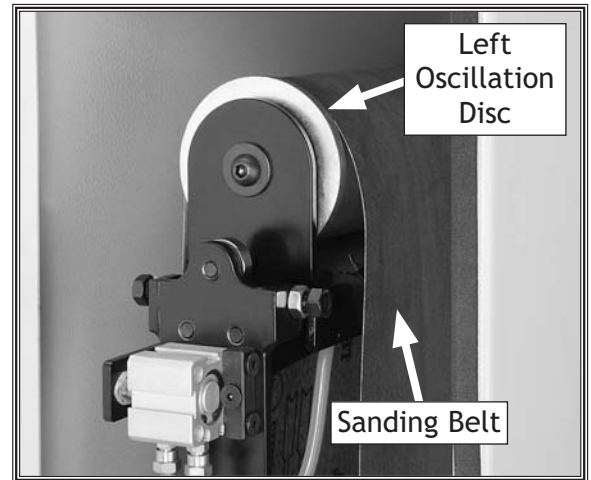
6. When you have the sanding belt evenly positioned between the oscillation discs on each end of the upper roller, move the tension lever to the upper catch by reversing from **Step 3**.

**Note:** The Model W1813 uses a spring tensioner to automatically apply the correct tension to the sanding belt when the tension lever is secured on the top catch.

7. Re-tighten the tension lock, then close and secure the sanding belt access door before starting the sander.



**Figure 18.** Tension lever secured under the bottom catch.



**Figure 19.** Proper position of the sanding belt on the upper roller.

## Conveyor Feed Rate

The conveyor feed rate dial (see **Figure 20**) adjusts the feed rate of the conveyor from 5 to 17 feet per minute (FPM). The correct speed for your operation depends on the type of stock you are sanding (e.g., hardwood vs. softwood), the depth of cut, and the stage of finish desired.

As a general rule, a slower feed rate will sand the surface smoother, but runs the risk of burning the wood. A higher feed rate will remove material faster, but runs the risk of overloading the motor (refer to **Amperage Load Meter** on **Page 22** for more information on sander work load). Use trial-and-error to determine the correct feed rate for your operation.



**Figure 20.** Conveyor feed rate dial.

# Depth of Cut

Maximum Depth of Cut ..... Approx. 0.016" (1/64")

The optimum depth of cut will vary based on the type of wood, conveyor feed rate, and sandpaper grit. Attempting to remove too much material can cause jamming, wood burning, rapid sanding belt wear or tearing, poor finish, or belt slippage.

Under most conditions, the sanding depth should not exceed 0.016" for any one pass. Each full turn of the elevation handwheel changes the height of the sanding belt from the workpiece approximately 0.025", with approximately 2/3 of a turn equal to the recommended 0.016" change in depth.

When properly adjusted, the depth of cut safety bar (see **Figure 21**) is an excellent tool for setting the *first* depth of cut. Refer to **Depth of Cut Safety Bar** on **Page 35** for more information.

Position the workpiece and sanding cabinet so that the bottom of the safety bar just touches the workpiece. This will set the sanding belt approximately 0.016" lower than the top surface of the workpiece. Then rotate the handwheel one full turn clockwise to raise the sanding belt high enough so that the first pass will take off any high spots. For additional passes, rotate the handwheel 2/3 of a turn counterclockwise to lower the sanding belt approximately 0.016".

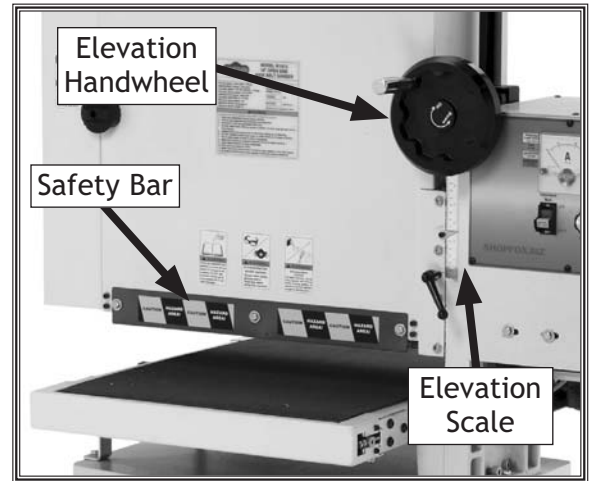


Figure 21. Depth of cut safety bar.

OPERATIONS

# Amperage Load Meter

The amperage load meter on the control panel (see **Figure 22**) shows how much amperage the sanding motor is drawing for the operation, or how hard the machine is working. If the depth of cut or the conveyor feed rate becomes too great, the sanding motor will draw an excessive amount of current (amperage), which may trip the circuit breaker or damage the machine.

Always keep your depth of cut within recommended specifications and monitor the conveyor feed rate so that the amperage load meter stays in the green **SAFE** range during the entire operation.

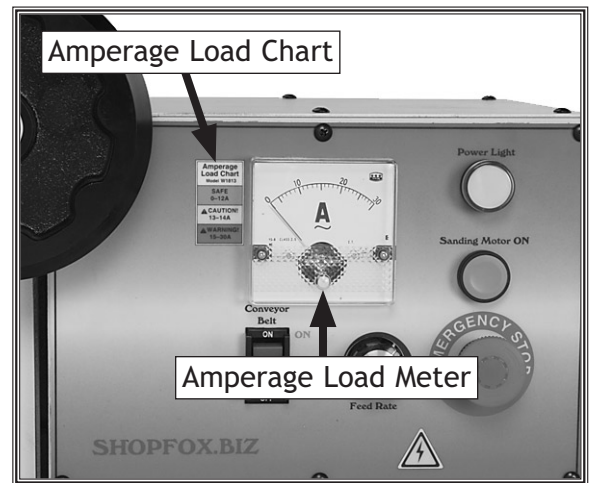


Figure 22. Amperage load chart and meter.

## NOTICE

**DO NOT VOID THE WARRANTY!** Keep the amperage load meter within the green **SAFE** range shown on the amperage load chart. If you operate the sander above 14A or in the red **WARNING** range, capacitor or motor failure may occur and will not be covered under warranty.



# Sanding Belt Oscillation Rate

To prevent sanding "streaks" in the workpiece and ensure an even finish, the sanding belt oscillates from side-to-side on the sanding drum during operation. This action is caused by the twisting motion of the upper sanding roller that causes the sanding belt to shift along the roller until it hits the oscillation disc at the end, which then causes the sanding belt to reverse direction to the other end.

We recommend that one oscillation cycle (the movement of the sanding belt from one side to the other) should be approximately 4-6 seconds.

**Note:** You will hear a metallic "thump" when the sanding belt changes oscillation direction. This noise is normal.

Tools Needed	Qty
Wrench 12mm .....	1

To adjust the sanding belt oscillation rate, do these steps:

1. DISCONNECT THE SANDER FROM POWER!
2. Open the sanding belt access door and identify the oscillation stops shown in **Figure 23**.
3. Loosen the oscillation stop jam nuts, then adjust the oscillation stop hex bolts equally in or out to change the oscillation rate.

**Note:** The oscillation rate is the time it takes the sanding belt to move from one side of the upper sanding roller to the other side and hit the oscillation disc at the end. Each hex bolt setting affects the oscillation rate in one direction. Tightening a stop hex bolt will cause a slower oscillation rate for that direction. Experiment to find the right oscillation rate for your operation.

4. Re-tighten the jam nuts without turning the hex bolts, then close the access door.
5. Connect the machine to power, start the sanding motor, then check the oscillation rate.
6. Repeat **Steps 1-5** until you are satisfied with the oscillation rate.

**NOTICE**

The sanding belt oscillation system requires a source of clean, dry compressed air connect to the machine and adjusted to 57-60 PSI. Without this rate of compressed air, the sander will not operate.

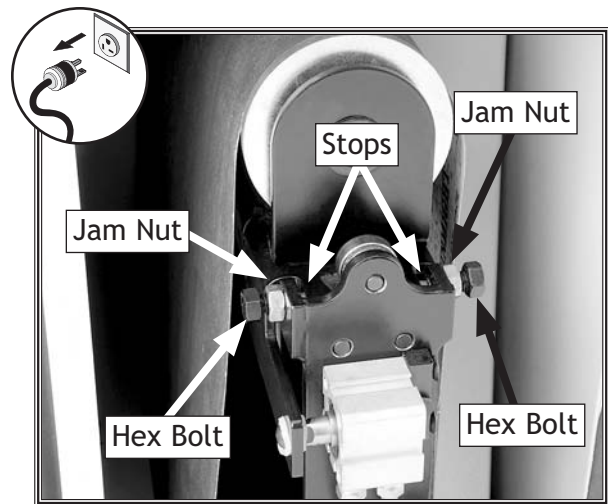


Figure 23. Sanding belt oscillation stops.

## Sanding Tips

Follow these instructions to ensure safe sanding operation and quality results:

- Replace the sandpaper with a higher grit to achieve a finer finish (refer to **Choosing Sandpaper** on **Page 20**).
- When making multiple passes on the workpiece, avoid lowering the sanding belt more than 0.016" ( $1/64$ " or  $2/3$  of a turn of the handwheel) for any one pass.
- Feed boards into the sander at different points on the conveyor to maximize sandpaper life and prevent uneven conveyor belt wear.
- **DO NOT** sand boards less than 6" long, 2" wide, or  $1/4$ " thick to avoid possible kickback, or damage to the workpiece or sander.
- Extend the life of the sanding belt by regularly using a PRO-STICK<sup>®</sup> sanding pad (refer to **ACCESSORIES** on **Page 26**).
- When sanding a workpiece with irregular widths, take very light sanding passes to prevent gouges. As the width of the workpiece decreases, the load on the sanding motor will reduce and the sanding drum will speed up, causing a gouge.
- **DO NOT** edge sand boards. This can cause boards to kickback, and may result in serious personal injury. Edge sanding boards also can cause damage to the conveyor belt and sandpaper.
- Feed the workpiece into the sander at a slight angle to maximize stock removal and sandpaper effectiveness, but feed the workpiece straight to reduce sandpaper grit scratch for the finish passes.
- When sanding workpieces with a bow or crown, place the high point up, which prevents the workpiece from rocking, and take very light passes.

### **WARNING**

Starting the sanding motor with a workpiece in contact with the sanding belt could cause the workpiece to kickback into the operator resulting in serious personal injury. Never start the sander with a workpiece or any object on the conveyor belt.

# Sanding Operation

To perform a typical sanding operation, follow these steps:

1. Read and follow the safety instructions at the beginning of the manual, and make sure the machine is set up properly before starting the sander.
2. Connect the source of compressed air to the sander and adjust the air regulator to 57-60 PSI.
3. Make sure the workpiece is clean and free of any defects or foreign materials that might cause kick-back or damage to the sander.
4. Start the dust collection system.
5. Use the elevation handwheel to set the correct sanding depth of cut for the first pass (refer to **Depth of Cut** on **Page 22** for detailed instructions).

**Note:** *Generally, the first pass removes the high spots.*

6. Turn the sanding motor **ON**.
7. Turn the conveyor **ON** and correctly adjust the conveyor feed rate for your operation (refer to **Conveyor Feed Rate** on **Page 21** for detailed instructions).
8. Stand to the side of the sanding path, then firmly hold the workpiece and ease it into the sander at the same feed rate as the conveyor.
9. While standing to the side of the sanding path, let the conveyor feed the workpiece out of the sander and into your hands.
10. For additional passes, use the elevation handwheel to lower the sanding drum to the correct sanding depth of cut for your operation, which should not exceed 0.016" ( $1/16$ ").

**Note:** *For workpieces wider than 18" and under 36", rotate the stock 180° horizontally to sand the other half. We recommend overlapping the sanding areas for good results.*

## **WARNING**

**DO NOT** sand more than one board at a time side-by-side. Minor variations in workpiece thickness can cause one board to be propelled into the operator at a high rate of speed by the sanding belt and could result in serious personal injury.

# ACCESSORIES

## Sander Accessories

The following sander accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800-840-8420 or at [sales@woodstockint.com](mailto:sales@woodstockint.com).

**Model D3003 Pro-Stick® Cleaning Pads** are the perfect accessory for wide belt sanders. Simply set the feed belt table to height and feed the 15" x 20" x 1" pad through to "unload" a dirty sanding belt. Regular cleaning greatly increases the lifespan of sanding belts.



Tough aluminum oxide sanding belts are available in 19" x 48" rolls.

- D3979—60 Grit
- D3980—80 Grit
- D3981—100 Grit
- D3982—120 Grit
- D3983—150 Grit



Use the **Shop Fox® D2271 Roller Table** wherever you need extra workpiece support. Features all-steel welded construction and measures 19" wide x 65" long. Comes with 9 ball bearing rollers and has four independently adjustable legs for any leveling requirement. Adjustable in height from 26<sup>3</sup>/<sub>8</sub>" to 44<sup>1</sup>/<sub>8</sub>" and has a 1000 lb. capacity.



The **Shop Fox® W1727 1 HP Dust Collector** is one of our top sellers and for good reasons. We have been selling this unit for years and it has proven itself in thousands of shops around the country. We have added a 2.5 micron top bag as standard equipment to capture the fine dust particles that normally end up all over your shop. Specifications: Motor 1 HP, 110/220V, single-phase with a 9/4.5 amp draw; 800 CFM air suction capacity; 5.67" static pressure; one 4" intake port; 9" balanced steel, radial fin impeller; 2.1 cubic foot bag capacity; 15<sup>3</sup>/<sub>4</sub>" x 39<sup>3</sup>/<sub>4</sub>" portable base; 54<sup>1</sup>/<sub>2</sub>" high with the bags inflated; approximate shipping weight of 59 lbs.



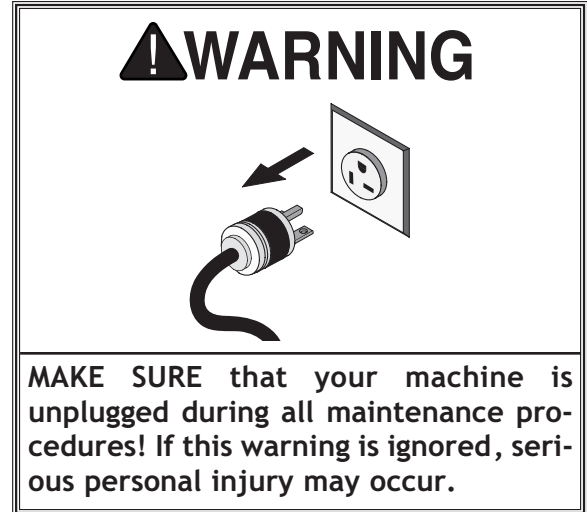
# MAINTENANCE

## General

Regular periodic maintenance on your machine will ensure its optimum performance. Make a habit of inspecting your machine each time you use it.

Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Damaged or worn sanding belt.
- Damaged, loose, or worn conveyor belt.
- Any other condition that could hamper the safe operation of this machine.



## Cleaning

Use a shop vacuum to remove sawdust from the sander. This is especially important for the internal working parts and motor. Dust build-up around the motor is a sure way to decrease its life span. If any essential lubrication is removed during cleaning, re-lubricate those areas.

## Lubrication

The bearings are factory lubricated and sealed and require no further lubrication. Simply leave them alone unless they need replacement.

The devices that do require bimonthly lubrication are the elevation dovetail ways and gears. Keep these devices adequately lubricated to keep your sander running smoothly and to protect your investment.

To lubricate the elevation ways, do these steps:

1. DISCONNECT THE SANDER FROM POWER!
2. Raise and lower the sanding cabinet to access the entire length of the front and rear elevation dovetail ways (see Figure 24).

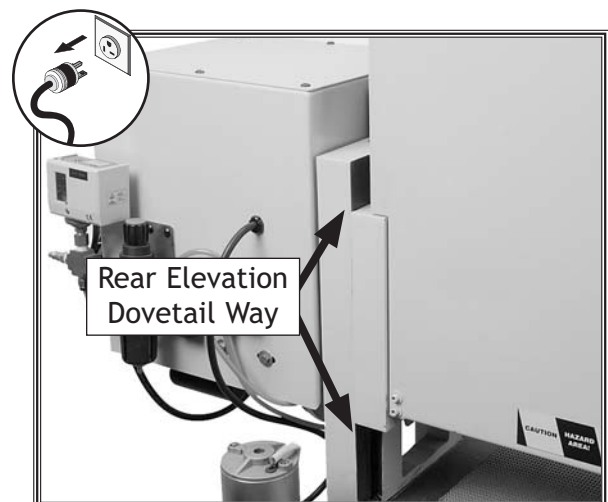


Figure 24. Elevation dovetail way (rear way shown).

3. Clean away any debris and built-up grime from the surfaces of the ways, then apply a thin coat of ISO 68 lubricant or an equivalent.
4. Move the sanding cabinet through its entire elevation range of motion to evenly distribute the oil.

<b>Tools Needed</b>	<b>Qty</b>
Hex Wrench 4mm .....	1

To lubricate the elevation gears, do these steps:

1. DISCONNECT THE SANDER FROM POWER!
2. Loosen the set screw in the elevation handwheel hub, then remove the handwheel to access the elevation gears, as shown in **Figure 25**.
3. Use a shop rag and solvent to clean away debris and grime from the gears, then use a brush to apply a thin coat of NLGI #2 grease or an equivalent.
4. Re-install the handwheel, then move the sanding cabinet up and down to evenly distribute the grease.

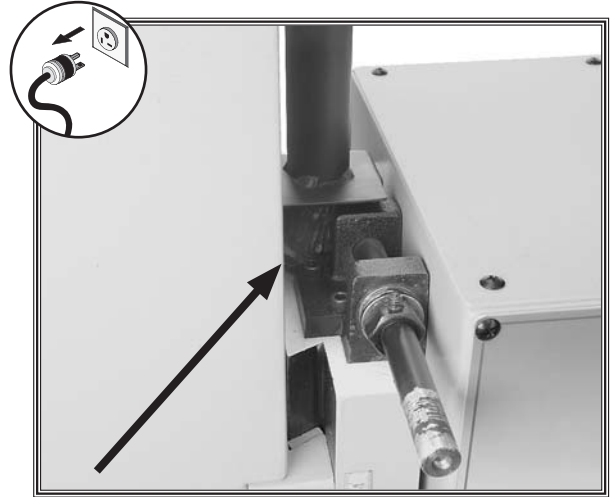


Figure 25. Elevation gears (elevation handwheel removed).

## Air Regulator/Filter

The air regulator filters the moisture from the incoming compressed air and deposits the collected water in the filter reservoir (see **Figure 26**).

To empty the filter reservoir, make sure there is incoming air pressure, then press the drain valve up. This will release a flow of air and the collected water from the reservoir.

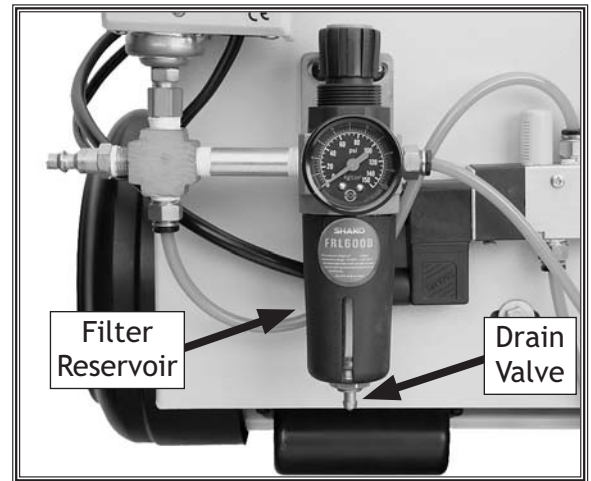


Figure 26. Air regulator filter reservoir and drain valve.



# SERVICE

## General

This section covers the most common service adjustments or procedures that may be necessary during the life of your machine.

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz).

## Conveyor Belt Tensioning

The conveyor belt may stretch with extended use, causing it to slip on the conveyor rollers. If this happens, the conveyor belt will need to be re-tensioned.

When you tension the conveyor belt, make sure you turn the left and right adjustment bolts by the same amount. Tensioning one side more than the other will cause tracking problems, which will require you to take additional steps to get the sander operating correctly.

**Note:** DO NOT overtighten the conveyor belt. Your goal is to reach an approximate  $\frac{3}{4}$ " hanging gap on the underside of the conveyor belt (see Figure 27) to make sure the belt no longer slips on the rollers.

Tools Needed	Qty
Wrench 10mm .....	1

To tension the conveyor belt, do these steps:

1. On both sides of the conveyor, measure and record the reference measurement between the tension dog on the adjustment bolt and the conveyor bracket flange, as shown in Figure 28.
2. Loosen the adjustment bolt jam nuts on both sides of the conveyor.

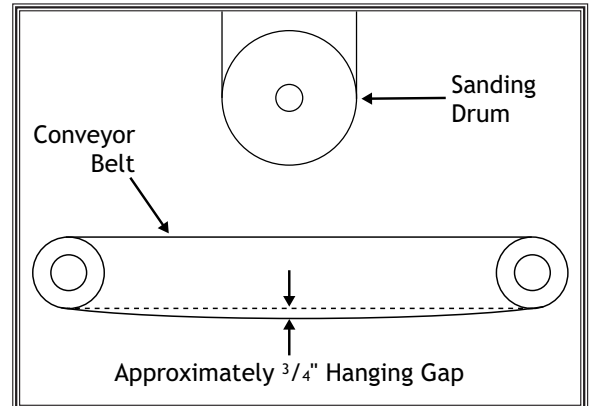
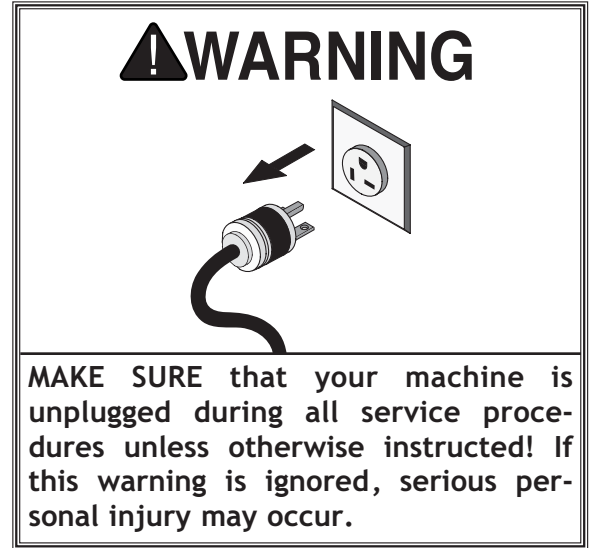


Figure 27. Conveyor belt hanging gap.

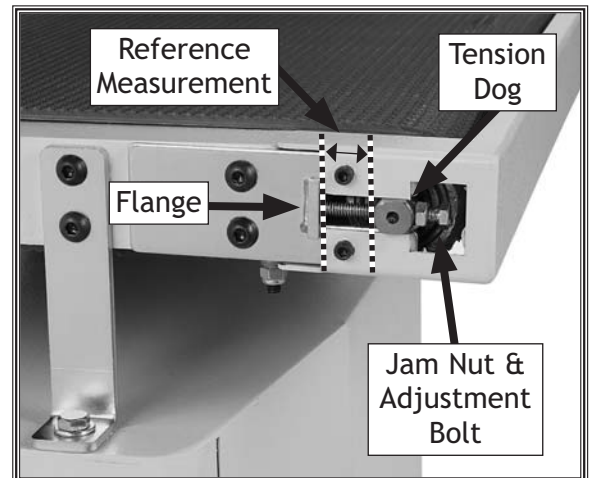


Figure 28. Conveyor tension adjustment bolt (one side shown).

SERVICE

3. Turn both adjustment bolts clockwise one full turn at a time until there is an approximate  $\frac{3}{4}$ " hanging gap on the underside of the conveyor belt.
4. Take another reading of the reference measurement on both sides of the conveyor and make sure they are the same.
  - If the belt starts to track to one side or the other when in operation, immediately turn the conveyor **OFF** and perform the tracking procedure below.

**⚠ CAUTION**

The conveyor roller assemblies and belt pose an entanglement hazard. Take extra care when performing the conveyor belt tensioning or tracking procedures to keep hands, fingers, and clothing away from the moving parts of the conveyor assembly.

## Conveyor Belt Tracking

If the conveyor belt tracks to either side, the belt could become damaged and you will have to replace it.

Adjusting conveyor belt tracking is a balancing process that takes patience and trial-and-error. You must tighten the adjusting bolt on the side the belt is tracking toward to make the belt move to the middle of the rollers, then loosen that same adjusting bolt to make the conveyor belt stay centered.

Tools Needed	Qty
Wrench 10mm .....	1

To adjust the conveyor belt tracking, do these steps:

1. Make sure the conveyor belt is properly tensioned (refer to **Conveyor Belt Tensioning** on **Page 29** for detailed instructions).
2. Turn the conveyor **ON** and set it to a slow feed rate, then watch it track.
3. Determine which side the conveyor belt is tracking toward, then tighten the adjustment bolt on that side until the belt begins to track in the opposite direction.

**Note:** Tracking changes may take a couple of minutes before they are noticeable.

4. When the conveyor belt is near the middle of the rollers, loosen the same adjustment bolt until the belt stops moving to the side and tracks straight and centered.
  - If the belt tracks too far to the other side, tighten the adjustment bolt as necessary to bring it back toward the middle, then repeat **Steps 2-4** until the tracking is correct.



# Gib Adjustment

The gib is sandwiched between the stationary and moving surfaces of the sander assembly and the dovetail ways. The gib controls the accuracy of the sander assembly movement along these ways. A tight gib makes the movement more accurate but harder to move, and will lead to premature wear of the ways. A loose gib makes the movements and measurements sloppy, but easier to move the sander assembly. The goal of gib adjustment is to remove the unnecessary sloppiness without causing the dovetail ways to bind.

Tools Needed	Qty
Hex Wrench 4mm .....	1
Wrench 12mm .....	1

To adjust the gib, do these steps:

1. DISCONNECT THE SANDER FROM POWER!
2. Clean and lubricate the dovetail way and gears (refer to **Lubrication** on **Page 27** for detailed instructions).
3. Loosen the four gib jam nuts along the front of the column, as shown in **Figure 29**.
4. Adjust the gib set screws *evenly* until there is a slight drag on the dovetail ways as you move the sander assembly up and down.
5. When you are satisfied with the setting, re-tighten the jam nuts without moving the set screws.



Figure 29. Gib adjustment jam nuts and set screws.

# Sanding Drum & Conveyor Parallelism

The sanding drum and conveyor must be parallel to one another to obtain accurate sanding results. This setting is made at the factory and should not have to be made again. However, if it is necessary to adjust the sanding drum and conveyor parallel to each other, follow the procedure below.

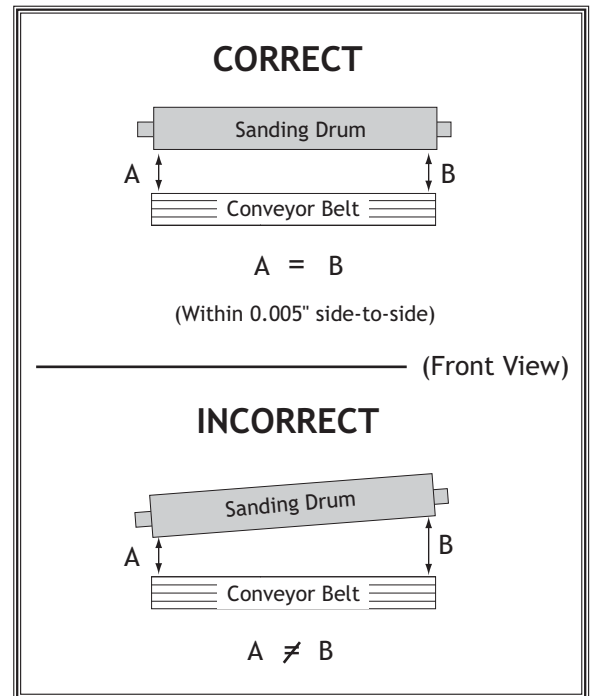
This process requires multiple accurate measurements, patience, and trial-and-error. Keep in mind that having the sanding drum parallel to the top of the conveyor belt is critical to the sanding operation (see **Figure 30**). The goal is to bring the sanding drum and conveyor parallel to one another within 0.005" from side-to-side.

Using a dial indicator is probably the most accurate method of taking measurement for this procedure. However, you can use gauge blocks and feeler gauges to attain acceptable results.

To make gauge blocks, square up a 7' long 2" x 4" board (refer to your jointer and planer manuals for detailed instructions), then cut it in half.

To check the sanding drum and conveyor parallelism, do these steps:

1. DISCONNECT THE SANDER FROM POWER!
2. Remove the sanding belt from the machine.
3. Record the precise measurements between the lowest point of the sanding drum and the conveyor from side-to-side.
  - If the measurements differ more than 0.005" from side-to-side, continue to the procedure on the next page to adjust the sanding drum and conveyor parallelism.



**Figure 30.** Sanding drum and conveyor belt parallelism.

Tools Needed	Qty
Hex Wrench 6mm .....	1
Hex Wrench 8mm .....	1

To adjust the sanding drum and conveyor parallelism, do these steps:

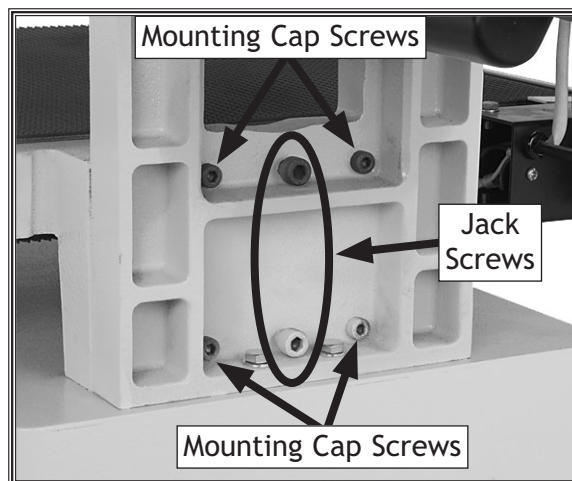
**Note:** Use the same measurements you recorded when checking the parallelism in the previous procedure.

1. Loosen the four column mounting cap screws on the right side of the column base shown in **Figure 31**.
2. Adjust the jack screws evenly to bring the sanding drum and conveyor parallel to each other within 0.005" from side-to-side.
  - To raise the left side of the sanding drum, tighten the upper jack screw.
  - To lower the left side of the sanding drum, tighten the lower jack screw.

3. Re-tighten the four mounting cap screws.

**Note:** Tighten the cap screws just until they are snug. Over-tightening them may change the setting accomplished with the jack screws.

4. Surface plane an 18" wide piece of stock so that it is the same height from side-to-side, then send it through the sander until it is flat.
5. Use a caliper to measure this workpiece from side-to-side.
  - If these measurements differ more than 0.005", repeat this procedure until you are satisfied with the sanding drum and conveyor parallelism.



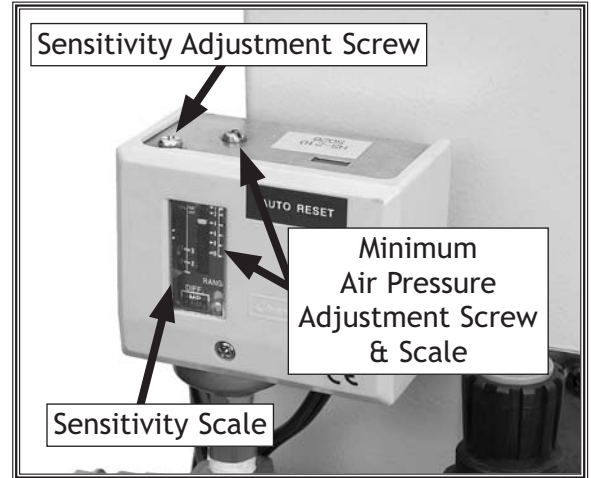
**Figure 31.** Column mounting cap and jack screws.

# Air Pressure Safety Switch

The sanding motor safety brake and the sanding oscillation system require at 57-60 PSI of air pressure connected to the machine to operate. The air pressure safety switch (see **Figure 32**) measures the amount of air pressure flowing into the machine. If the air pressure is not adequate, the air pressure safety switch will not allow power to flow to the sander.

The air pressure safety switch was calibrated and set at the factory and should not require any further adjustment. However, we recommend that you verify the settings.

The red pointer on the sensitivity scale should be set at "0" on the scale, which is adjusted with the sensitivity adjustment screw shown in **Figure 32**. The minimum air pressure scale on the right of the scale window should read 4kg/cm<sup>2</sup>, which is adjusted with the adjustment screw on the top of the switch.



**Figure 32.** Air pressure safety switch.

**⚠ WARNING**

The safety devices on this machine are there for your safety. **DO NOT** operate this sander if any safety device is damaged or is not operating correctly. Otherwise, serious personal injury could result.

# Depth of Cut Safety Bar

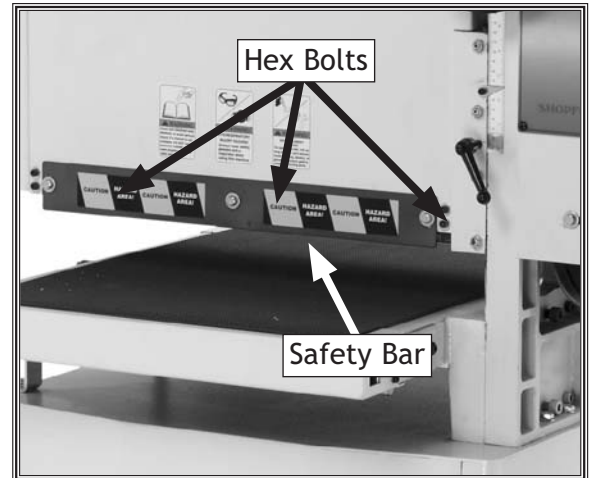
When properly adjusted, the depth of cut safety bar prevents the operator from sanding a workpiece that is beyond a safe height and that could become a kickback hazard.

The position of this safety bar (see **Figure 33**) was set by the factory at approximately 0.047" ( $\frac{3}{64}$ ") above the lowest point of the sanding drum. For safe operation, make sure that this safety bar remains at this setting.

Tools Needed	Qty
Wrench 10mm .....	1
Feeler Gauge 0.047" ( $\frac{3}{64}$ ") .....	1

To adjust the depth of cut safety bar to the factory setting, do these steps:

1. Make sure the sanding drum and conveyor are parallel (refer to **Page 32** for detailed instructions).
2. Surface plane and sand an 18" wide piece of stock until it is flat and the same height from side-to-side.
3. DISCONNECT THE SANDER FROM POWER!
4. Open the sanding belt access door and remove the sanding belt from the machine.
5. Loosen the three hex bolts securing the safety bar (see **Figure 33**), raise the bar up slightly, then tighten the hex bolts enough to hold it in place.
6. Place the workpiece from **Step 2** under the sanding drum, then lower the sanding cabinet until the sanding drum is just touching the workpiece.
7. Remove the workpiece from under the sanding drum and position it directly under the depth of cut safety bar.
8. Loosen the three hex bolts securing the safety bar, then position the bar so that it is 0.047" ( $\frac{3}{64}$ ") above the workpiece from side-to-side, then fully re-tighten the hex bolts to secure it.
9. Re-install the sanding belt and secure the access door.



**Figure 33.** Depth of cut safety bar.

# Adjusting Pressure Rollers

The height of the pressure rollers (see **Figure 34**) is set slightly below the bottom of the sanding drum to keep the workpiece firmly against the conveyor belt as it passes through the sander, preventing workpiece kickback.

The pressure roller height was set by the factory at approximately 0.063" (1/16") below the lowest point of the sanding drum.

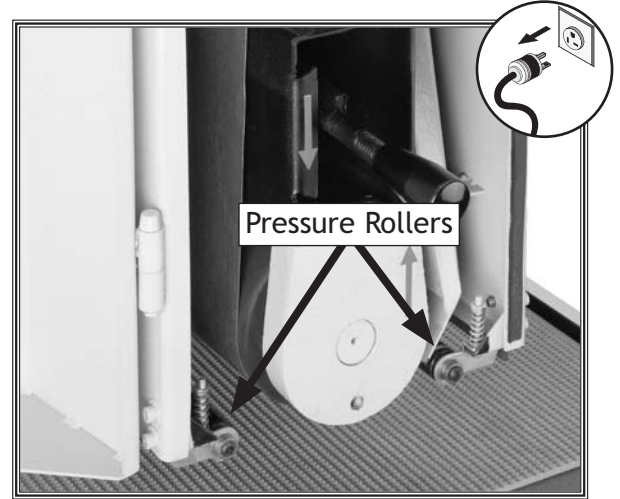
Tools Needed	Qty
Hex Wrench 4mm .....	1
Feeler Gauge 0.063" (1/16") .....	1

To adjust the height of the pressure rollers, do these steps:

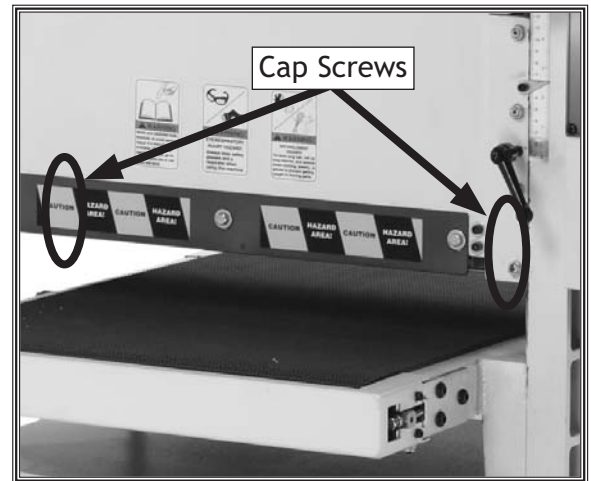
1. Make sure the sanding drum and conveyor are parallel (refer to **Page 32** for detailed instructions).
2. Surface plane and sand a 18" wide piece of stock until it is flat and the same height from side-to-side.
3. **DISCONNECT THE SANDER FROM POWER!**
4. Open the sanding belt access door and remove the sanding belt from the machine.
5. Loosen the eight adjustment cap screws securing the front and rear pressure rollers (see **Figure 35**).

**Note:** There are four adjustment cap screws on the front and four on the rear of the sanding cabinet.

6. Place the workpiece from **Step 2** under the sanding drum, then elevate the sander assembly so that the sanding drum is 0.063" (1/16") above the workpiece.
7. Manually adjust the pressure rollers so that they are lightly resting on the workpiece from side-to-side, then retighten the cap screws to secure the pressure rollers in place.
8. Re-install the sanding belt and secure the access door.



**Figure 34.** Front and rear pressure rollers.



**Figure 35.** Pressure roller adjustment cap screws (front cap screws shown).

# Replacing Conveyor Belt

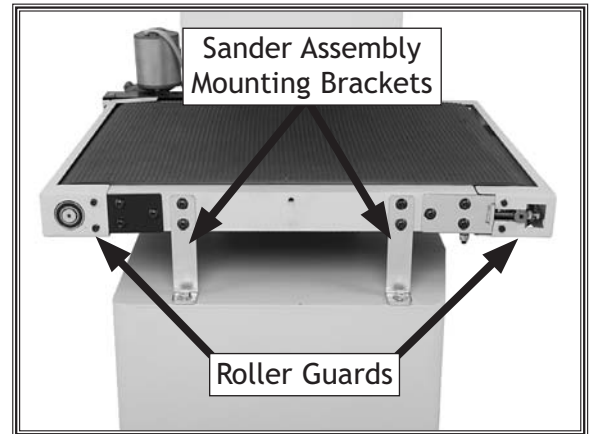
If the conveyor belt becomes damaged or too worn to properly adjust the tension, you must replace it.

Tools Needed	Qty
Hex Wrench 4mm .....	1
Hex Wrench 5mm .....	1
Wrench 10mm .....	1
Wrench 12mm .....	1

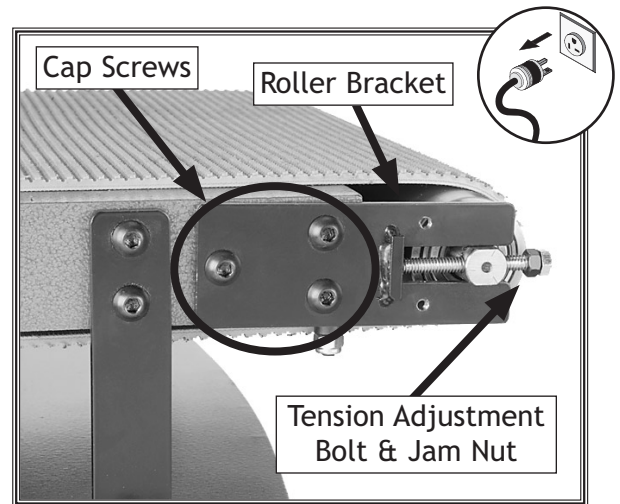
To replace the conveyor belt, do these steps:

1. DISCONNECT THE SANDER FROM POWER!
2. Remove the cap screws and flat washers securing the front and rear conveyor roller guards (see **Figure 36**), then remove the guards.
3. Loosen the conveyor tension jam nuts on either side of the conveyor (see **Figure 37**), then release the tension on the conveyor belt by loosening the tension adjustment bolts.
4. Remove the three cap screws securing the *left* front roller bracket shown in **Figure 37**, then, while supporting the front conveyor roller assembly with one hand, remove the bracket.
5. Carefully pull the front conveyor roller assembly from the conveyor belt.

**Note:** At this point, the front roller bracket is still attached to the conveyor on the right side and will stay in place.



**Figure 36.** Sander assembly mounting brackets and conveyor roller guards.



**Figure 37.** Roller bracket mounting cap screws and conveyor tension adjustment bolt.

## NOTICE

Take care not to scratch or dent the surface of the front conveyor roller as you remove it from the sander. Damage to the conveyor roller could result in premature wear of the conveyor belt.

Continued on next page



6. Remove the three cap screws securing the left rear conveyor roller bracket to the conveyor support, but leave the roller assembly and the bracket in place, as shown in **Figure 38**.

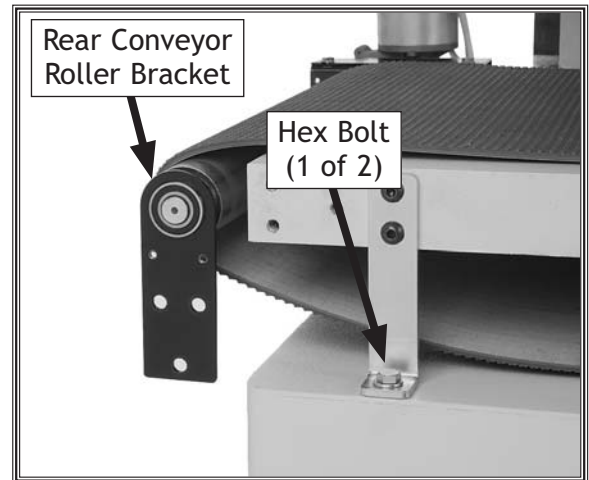
## NOTICE

After loosening the left conveyor roller bracket, the rear conveyor roller assembly is supported by its attachment to the conveyor motor assembly. However, to avoid damaging the roller assembly, **DO NOT** put unnecessary strain on this assembly.

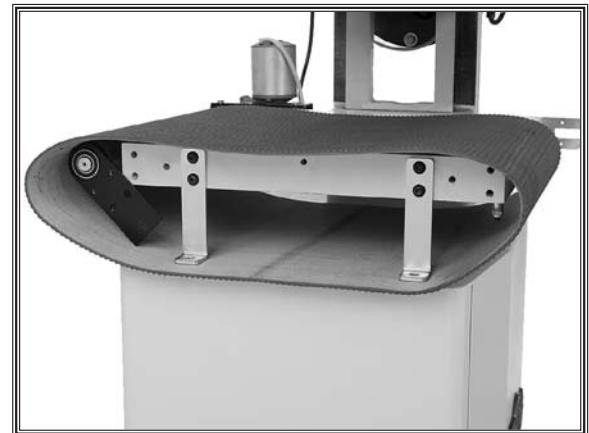
7. Loosen, but do not remove, the upper cap screws on the left side of the conveyor assembly that secure the sander assembly to the mounting brackets (see **Figure 36** on **Page 37**).

*Note: Loosening these cap screws will relieve the strain on the brackets for the next step.*

8. Remove the two hex bolts and flat washers on the left side of the conveyor that secure the sander assembly mounting brackets to the cabinet stand (see **Figure 38**).
9. With assistance, lift the left side of the conveyor assembly up approximately 1", then remove the conveyor belt, as shown in **Figure 39**.
10. Slide the new conveyor belt onto the conveyor assembly, then re-install the parts removed or loosened in reverse order.
11. Re-tension the conveyor belt, and adjust the tracking (refer to **Pages 29 & 30**).
12. Re-adjust the sanding drum and conveyor parallelism (refer to **Page 32**).



**Figure 38.** Rear conveyor roller bracket unattached from the conveyor support.



**Figure 39.** Removing the conveyor belt from the machine.



# Electrical Safety Instructions

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Study this diagram carefully. If you notice differences between your machine and these wiring diagrams, call Woodstock International Technical Support at (360) 734-3482.

## WARNING

1. **SHOCK HAZARD.** Disconnect the power from the machine before servicing electrical components. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death.
2. **CIRCUIT REQUIREMENTS.** You **MUST** follow the specifications and direction of the **ELECTRICAL** section on **Page 10**. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**
3. **GROUNDING CIRCUIT.** Electrocution or fire could result if the machine is not grounded and installed in compliance with electrical codes. Compliance **MUST** be verified by a qualified electrician.
6. **MOTOR WIRING.** The motor wiring shown in these diagrams are current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.
7. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

## NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at [www.shopfox.biz](http://www.shopfox.biz).

**DANGER**

**SHOCK HAZARD!**  
Disconnect power before servicing electrical parts. Touching electrified parts will result in severe burns, electrocution, or death.


**COLOR KEY**

BLACK	
WHITE	
GREEN	
RED	
BLUE	
YELLOW	

**SERVICE**

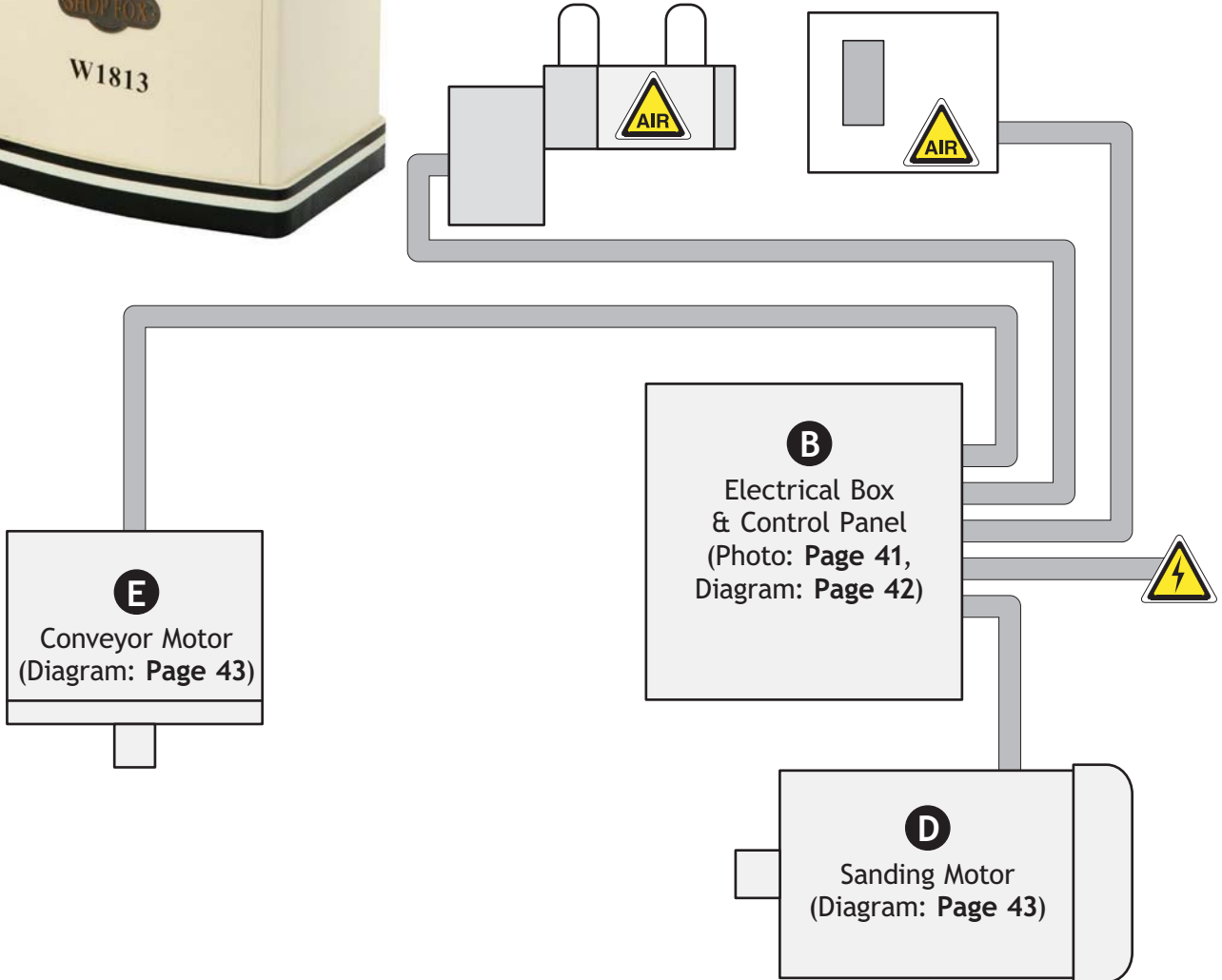
# Electrical Wiring Overview



 Components also have pneumatic connections. Refer to Page 44.

**A**  
Air Pressure  
Brake Solenoid  
(Diagram: Page 43)

**C**  
Air Pressure  
Safety Switch  
(Diagram: Page 43)



SERVICE



**READ ELECTRICAL SAFETY  
ON PAGE 39!**



# Electrical Box & Control Panel

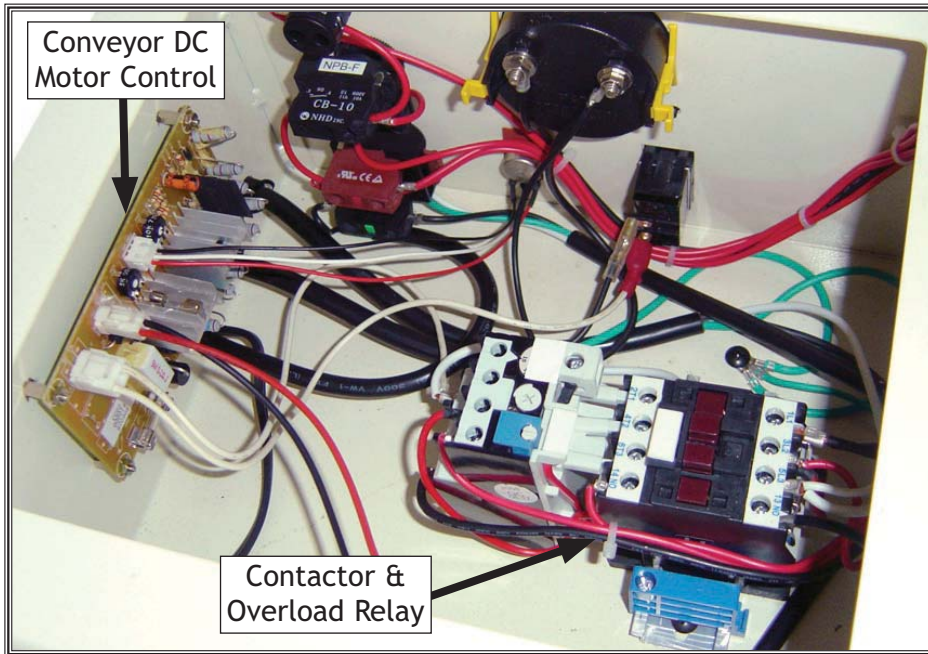


Figure 40. Electrical box wiring (Diagram: Page 42).

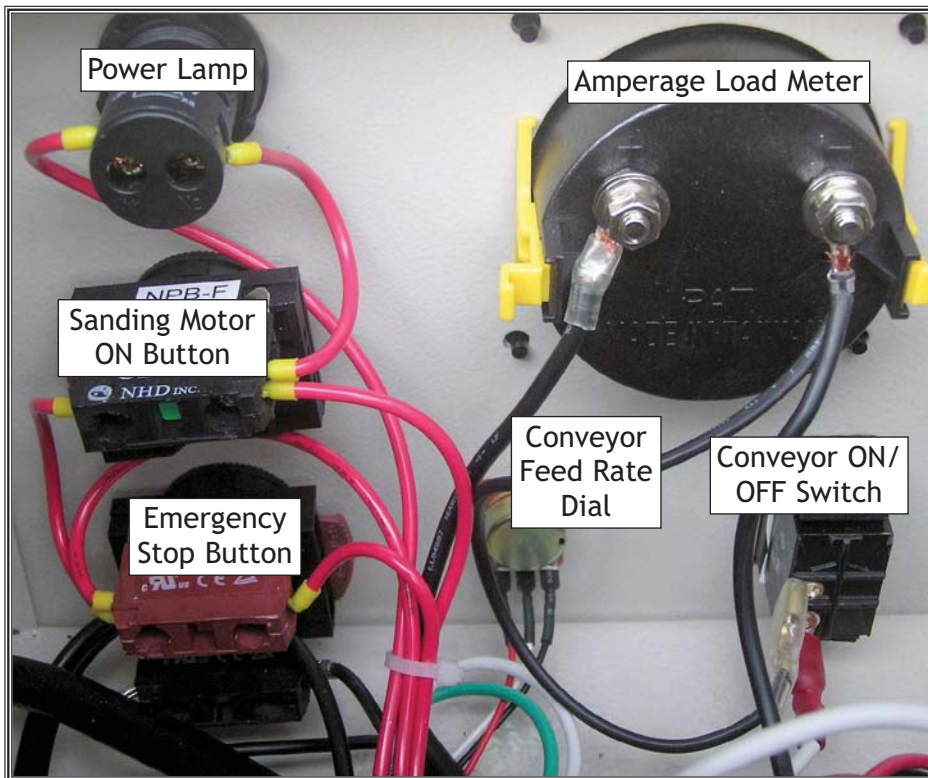
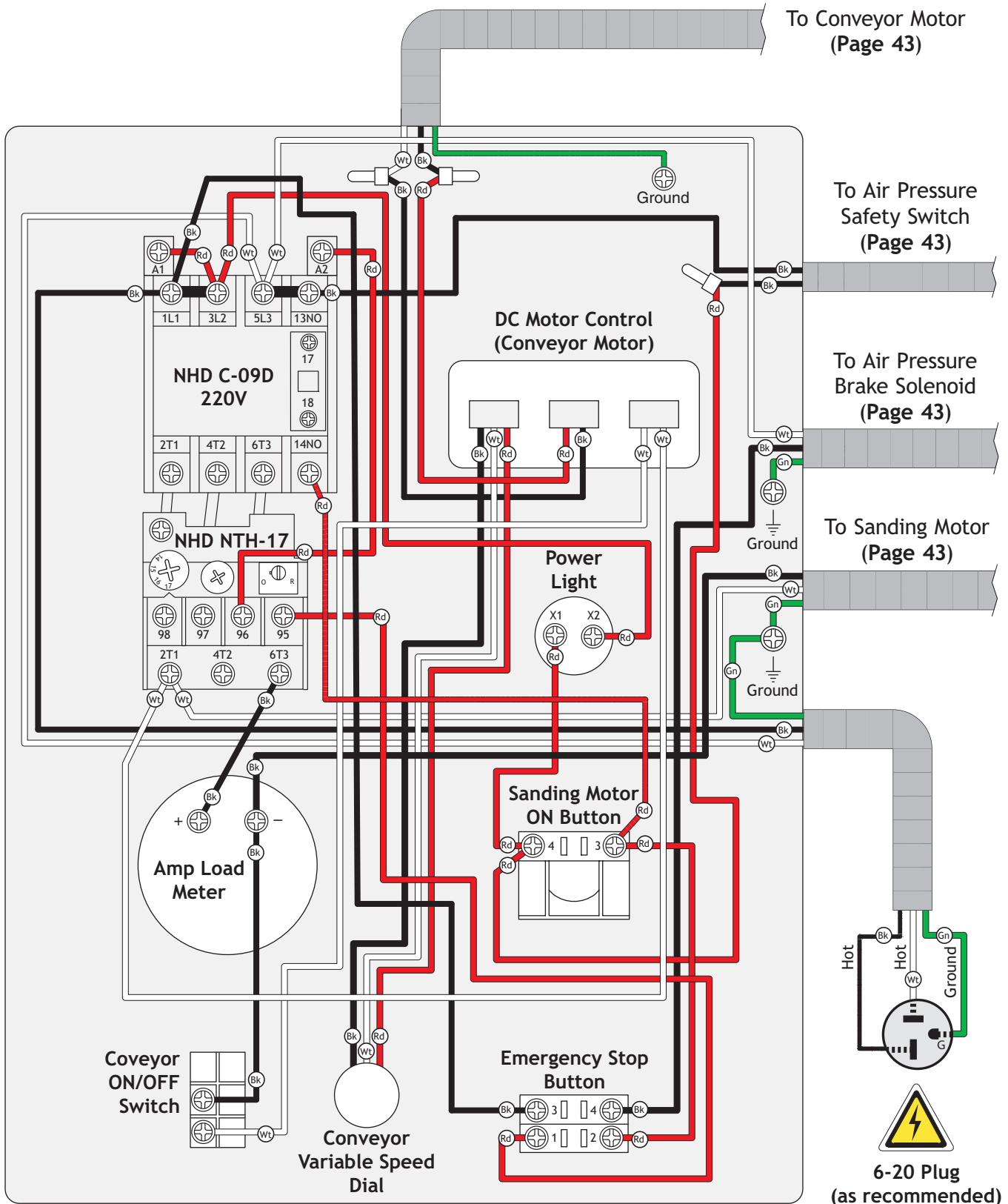


Figure 41. Control panel wiring (Diagram: Page 42).

SERVICE



# Electrical Box & Control Panel Wiring Diagram



SERVICE



**READ ELECTRICAL SAFETY ON PAGE 39!**





# Electrical Components



Figure 42. Sanding motor wiring.

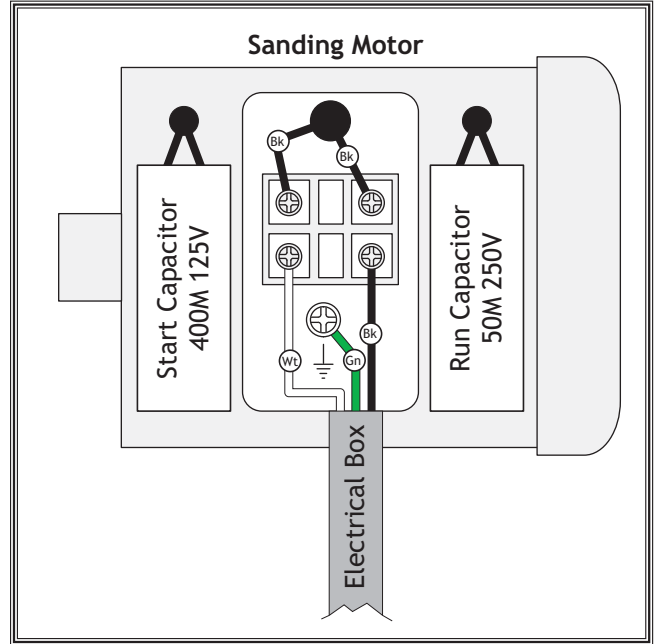


Figure 45. Sanding motor wiring diagram.

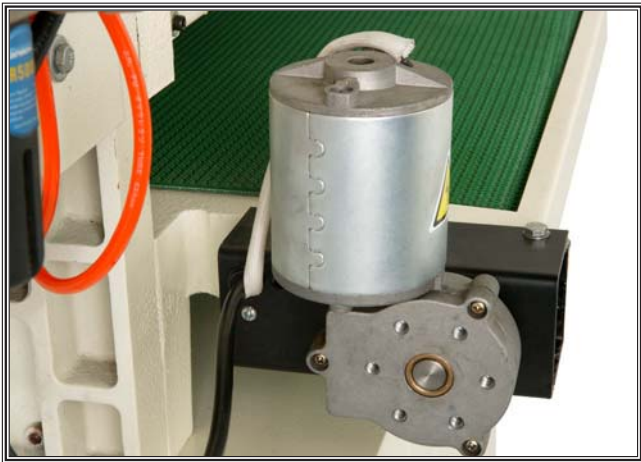


Figure 43. Conveyor motor wiring.

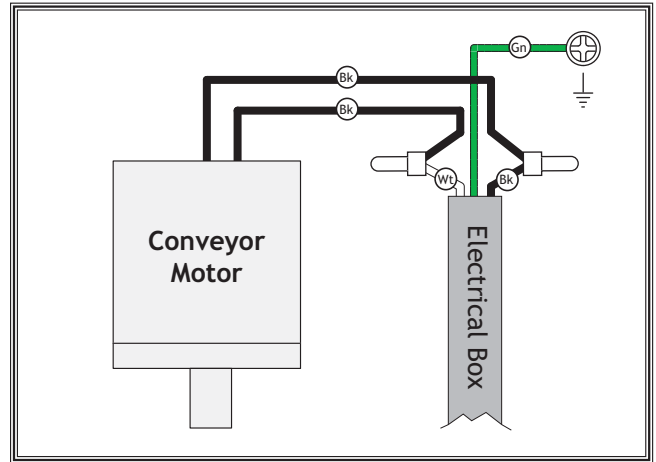


Figure 46. Conveyor motor wiring diagram.

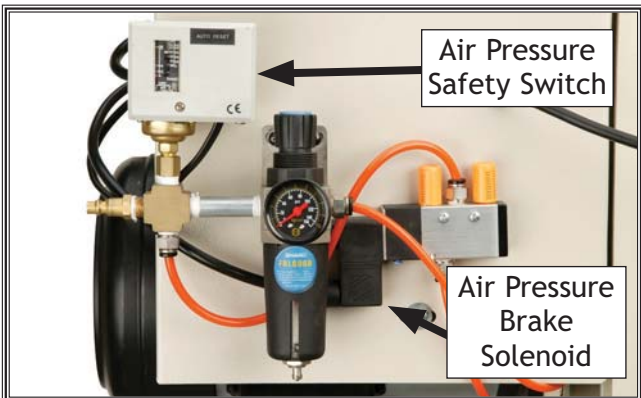


Figure 44. Air pressure safety switch and brake solenoid.

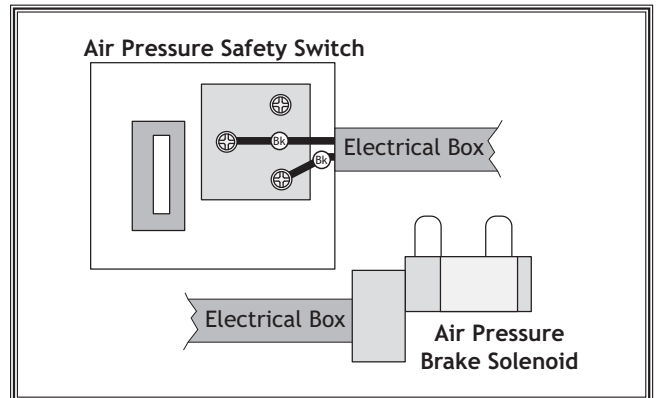
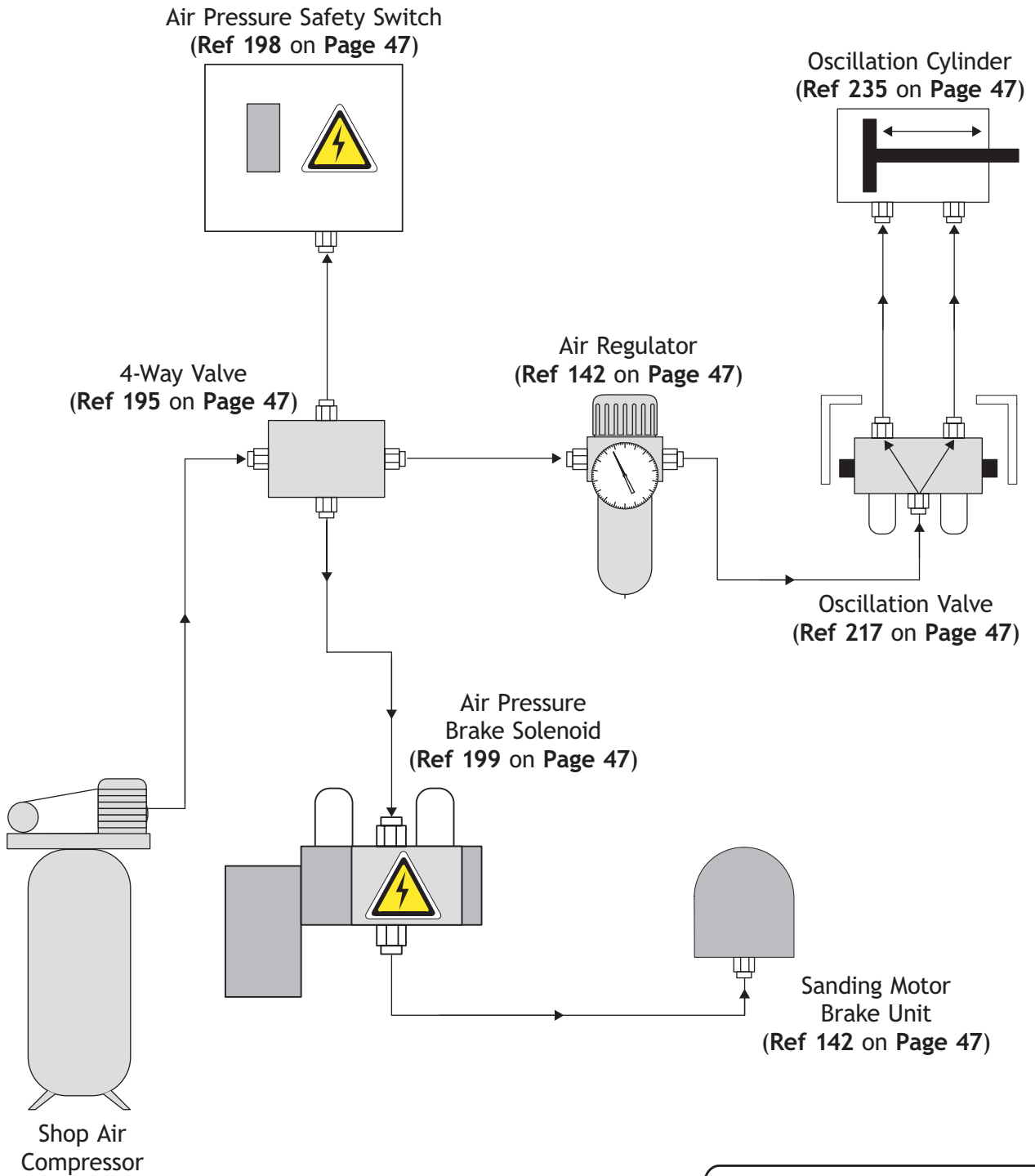



Figure 47. Air pressure safety switch and brake solenoid wiring diagrams.

SERVICE



# Pneumatic System Overview



 Components also have electrical connections. Refer to Page 43.

SERVICE

# Troubleshooting

This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT** make any adjustments until power is disconnected and moving parts have come to a complete stop!



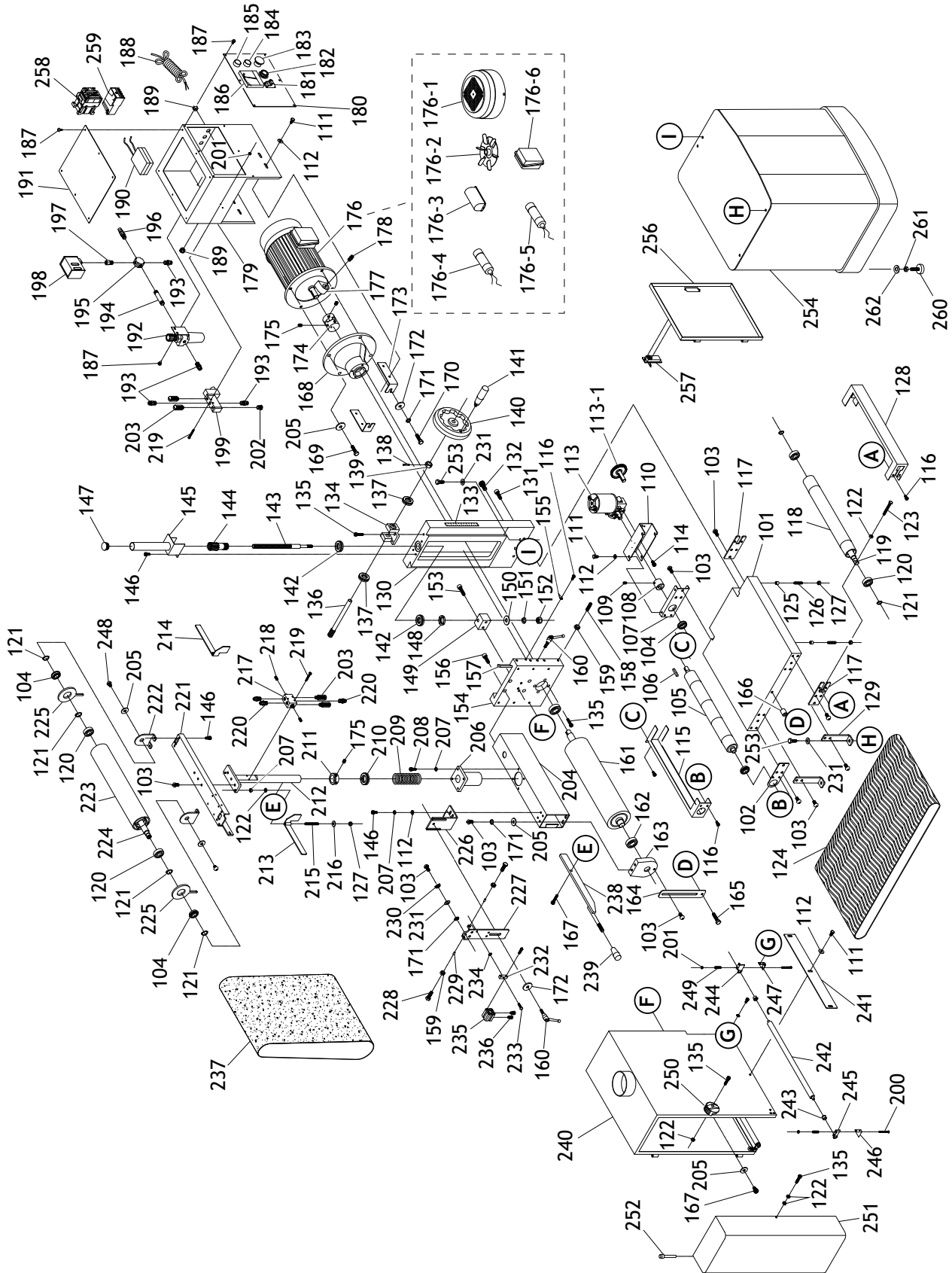
PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> <li>1. Switch disabling key removed.</li> <li>2. Emergency stop push-button engaged/faulty.</li> <li>3. Power supply switched OFF or at fault.</li> <li>4. Plug/receptacle at fault/wired wrong.</li> <li>5. Start capacitor at fault.</li> <li>6. Air pressure safety switch open/at fault.</li> <li>7. Motor connection wired wrong.</li> <li>8. Thermal overload relay has tripped.</li> <li>9. Wall circuit breaker tripped.</li> <li>10. Contactor not energized/has poor contacts.</li> <li>11. Wiring open/has high resistance.</li> <li>12. Motor ON button or ON/OFF switch at fault.</li> <li>13. Motor at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Install switch disabling key.</li> <li>2. Rotate button to reset/replace it.</li> <li>3. Ensure power supply is on/has correct voltage.</li> <li>4. Test for good contacts; correct the wiring.</li> <li>5. Test/replace if faulty.</li> <li>6. Adjust air pressure safety switch; replace if faulty.</li> <li>7. Correct motor wiring connections (<b>Page 43</b>).</li> <li>8. Reset; adjust trip load dial if necessary; replace.</li> <li>9. Ensure circuit size is correct/replace weak breaker.</li> <li>10. Test all legs for power/replace if faulty.</li> <li>11. Check/fix broken, disconnected, or corroded wires.</li> <li>12. Replace button/switch.</li> <li>13. Test/repair/replace.</li> </ol>
Machine stalls or is underpowered.	<ol style="list-style-type: none"> <li>1. Workpiece material not suitable for machine.</li> <li>2. Depth of cut too much; feed rate too fast.</li> <li>3. Dust collection ducting problem.</li> <li>4. Run capacitor at fault.</li> <li>5. Motor wired incorrectly.</li> <li>6. Plug/receptacle at fault.</li> <li>7. Motor bearings at fault.</li> <li>8. Machine undersized for task.</li> <li>9. Contactor not energized/has poor contacts.</li> <li>10. Motor overheated.</li> <li>11. Motor at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Only sand wood/ensure moisture is below 20%.</li> <li>2. Properly adjust depth of cut (<b>Page 22</b>); reduce conveyor feed rate.</li> <li>3. Clear blockages, seal leaks, use smooth wall duct, eliminate bends, close other branches.</li> <li>4. Test/repair/replace.</li> <li>5. Wire motor correctly (<b>Page 43</b>).</li> <li>6. Test for good contacts/correct wiring.</li> <li>7. Test/repair/replace.</li> <li>8. Clean/replace sandpaper; reduce feed rate/sanding depth of cut (<b>Page 22</b>)</li> <li>9. Test all legs for power/replace if faulty.</li> <li>10. Clean motor, let cool, and reduce workload.</li> <li>11. Test/repair/replace.</li> </ol>
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> <li>1. Motor or component loose.</li> <li>2. Machine incorrectly mounted.</li> <li>3. Motor fan rubbing on fan cover.</li> <li>4. Motor bearings at fault.</li> <li>5. Conveyor gearbox at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inspect/replace damaged bolts/nuts, and re-tighten with thread locking fluid.</li> <li>2. Tighten mounting bolts; relocate/shim machine.</li> <li>3. Fix/replace fan cover; replace loose/damaged fan.</li> <li>4. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>5. Rebuild gearbox for bad gear(s)/bearing(s).</li> </ol>



PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Grit rubs off sanding belt easily.	<ol style="list-style-type: none"> <li>1. Sanding belt has been stored in an incorrect environment.</li> <li>2. Sanding belt has been folded or smashed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Store sanding belts away from extremely dry/moist environment or hot temperatures.</li> <li>2. Store sanding belt flat, not folded or bent.</li> </ol>
Sanding belt clogs quickly or workpiece burns.	<ol style="list-style-type: none"> <li>1. Sanding depth of cut too aggressive.</li> <li>2. Sanding softwood or workpiece with high residue.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce sanding depth of cut (<b>Page 22</b>) or use coarser grit sandpaper.</li> <li>2. Use different stock, or accept the characteristics of the stock and plan on cleaning/replacing belts frequently; remove residue, such as varnish/paint, before sanding.</li> </ol>
Burn marks on workpiece.	<ol style="list-style-type: none"> <li>1. Using too fine of sanding grit.</li> <li>2. Sanding depth of cut too aggressive.</li> <li>3. Workpiece moves too slow through sander.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use a coarser grit sanding belt.</li> <li>2. Properly adjust depth of cut (<b>Page 22</b>).</li> <li>3. Increase conveyor feed rate.</li> </ol>
Glazed sanding surface.	<ol style="list-style-type: none"> <li>1. Sanding wet stock.</li> <li>2. Sanding stock with high residue.</li> </ol>	<ol style="list-style-type: none"> <li>1. Only sand wood/ensure moisture is below 20%.</li> <li>2. Remove residue, such as varnish or paint, before sanding, or accept the characteristics of the stock and plan on cleaning/replacing sanding belts frequently.</li> </ol>
Workpiece slips on conveyor.	<ol style="list-style-type: none"> <li>1. Conveyor belt dirty or worn.</li> <li>2. Pressure rollers not adjusted properly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean/replace conveyor belt.</li> <li>2. Properly adjust pressure roller height (<b>Page 36</b>).</li> </ol>
Uneven workpiece thickness from side-to-side.	<ol style="list-style-type: none"> <li>1. Sanding drum not parallel to conveyor.</li> <li>2. Conveyor belt is worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the sanding belt to conveyor parallelism (<b>Page 32</b>).</li> <li>2. Replace conveyor belt (<b>Page 37</b>).</li> </ol>

# PARTS

## Main Breakdown



# Main Parts List

REF	PART #	DESCRIPTION
101	X1813101	CONVEYOR TABLE
102	X1813102	CONVEYOR ROLLER BRACKET LR
103	XPS16M	PHLP HD SCR M8-1.25 X 16
104	X1813104	BALL BEARING 6003ZZNR
105	X1813105	CONVEYOR ROLLER REAR
106	XPB12M	KEY 5 X 5 X 30
107	X1813107	CONVEYOR ROLLER BRACKET RR
108	X1813108	LOCK COLLAR
109	XPSS03	SET SCREW 1/4-20 X 3/8
110	X1813110	CONVEYOR MOTOR BRACKET
111	XPB19	HEX BOLT 1/4-20 X 1/2
112	XPW06	FLAT WASHER 1/4
113	X1813113	CONVEYOR MOTOR
113-1	X1813113-1	CONVEYOR MOTOR WORM
114	XPSB26M	CAP SCREW M6-1 X 12
115	X1813115	CONVEYOR ROLLER GUARD REAR
116	XPSB02	CAP SCREW 10-24 X 3/8
117	X1813117	CONVEYOR ROLLER BRACKET FRONT
118	X1813118	CONVEYOR ROLLER FRONT
119	X1813119	CONVEYOR ROLLER SHAFT FRONT
120	X1813120	BALL BEARING 6203ZZ
121	XPR18M	EXT RETAINING RING 17MM
122	XPN05	HEX NUT 1/4-20
123	XPB10	HEX BOLT 1/4-20 X 2
124	X1813124	CONVEYOR BELT
125	X1813125	LOCK COLLAR
126	XPSS39	SET SCREW 1/4-20 X 1-1/4
127	XPLN02	LOCK NUT 1/4-20
128	X1813128	CONVEYOR ROLLER GUARD FRONT
129	X1813129	SUPPORT LEG
130	X1813130	SUPPORT FRAME
131	XPSB31M	CAP SCREW M8-1.25 X 25
132	XPSB61M	CAP SCREW M10-1.5 X 20
133	X1813133	ELEVATION SCALE
134	X1813134	WORM ROD BRACKET
135	XPSB06	CAP SCREW 1/4-20 X 1
136	X1813136	WORM ROD
137	XP51102	THRUST BEARING 51102
138	XPRP39M	ROLL PIN 4 X 20
139	X1813139	SPECIAL LOCK NUT
140	X1813140	HANDWHEEL
141	X1813141	HANDLE
142	XP51105	THRUST BEARING 51105
143	X1813143	ELEVATION LEADSCREW
144	X1813144	WORM SHAFT
145	X1813145	WORM GUARD
146	XPSB04	CAP SCREW 1/4-20 X 1/2
147	X1813147	PLUG
148	X1813148	SPANNER NUT
149	X1813149	ELEVATION LEADSCREW BRACKET

REF	PART #	DESCRIPTION
150	XPW04M	FLAT WASHER 10MM
151	XPLW06M	LOCK WASHER 10MM
152	XPLN05M	LOCK NUT M10-1.5
153	XPSB11	CAP SCREW 5/16-18 X 1-1/4
154	X1813154	LOWER SANDING BELT FRAME
155	X1813155	POINTER
156	XPSB03	CAP SCREW 5/16-18 X 1
157	X1813157	GIB
158	XPSS19	SET SCREW 5/16-18 X 1-1/4
159	XPN02	HEX NUT 5/16-18
160	X1813160	LOCK HANDLE
161	X1813161	SANDING DRUM
162	XP6205	BALL BEARING 6205ZZ
163	X1813163	BEARING HOUSING
164	X1813164	AUXILIARY SUPPORT PLATE
165	XPB20M	HEX BOLT M8-1.25 X 35
166	X1813166	SPACER
167	XPSB30	CAP SCREW 5/16-18 X 1/2
168	X1813168	MOTOR MOUNT
169	XPB03	HEX BOLT 5/16-18 X 1
170	XPB12	HEX BOLT 5/16-18 X 1-1/4
171	XPLW01	LOCK WASHER 5/16
172	XPW07	FLAT WASHER 5/16
173	X1813173	ELECT. BOX SUPPORT BRACKET
174	X1813174	COUPLER
175	XPSS02	SET SCREW 5/16-18 X 3/8
176	X1813176	MOTOR 3HP 220V 1PH
176-1	X1813176-1	MOTOR FAN COVER
176-2	X1813176-2	MOTOR FAN
176-3	X1813176-3	CAPACITOR COVER
176-4	X1813176-4	R CAP. 50M 250V 1-7/8 X 3-1/4
176-5	X1813176-5	S CAP. 400M 125V 1-7/8 X 3-1/4
176-6	X1813176-6	MOTOR JUNCTION BOX
177	X1813177	SANDING MOTOR BRAKE UNIT
178	X1813178	STRAIN RELIEF
179	X1813179	ELECTRICAL BOX
180	X1813180	CONTROL PANEL
181	X1813181	POWER SWITCH
182	X1813182	CONVEYOR SPEED CONTROL
183	X1813183	EMERGENCY STOP BUTTON
184	X1813184	SANDING MOTOR BUTTON
185	X1813185	POWER INDICATION LAMP
186	X1813186	AMPERAGE METER
187	XPHTK6	TAP SCREW #10 X 3/8
188	X1813188	POWER CORD 14GA 6-1/2FT
189	X1813189	STRAIN RELIEF
190	X1813190	DC MOTOR SPEED CONTROLLER
191	X1813191	ELECTRIC BOX UPPER COVER
192	X1813192	AIR REGULATOR
193	X1813193	TUBE CONNECTOR

# Main Parts List

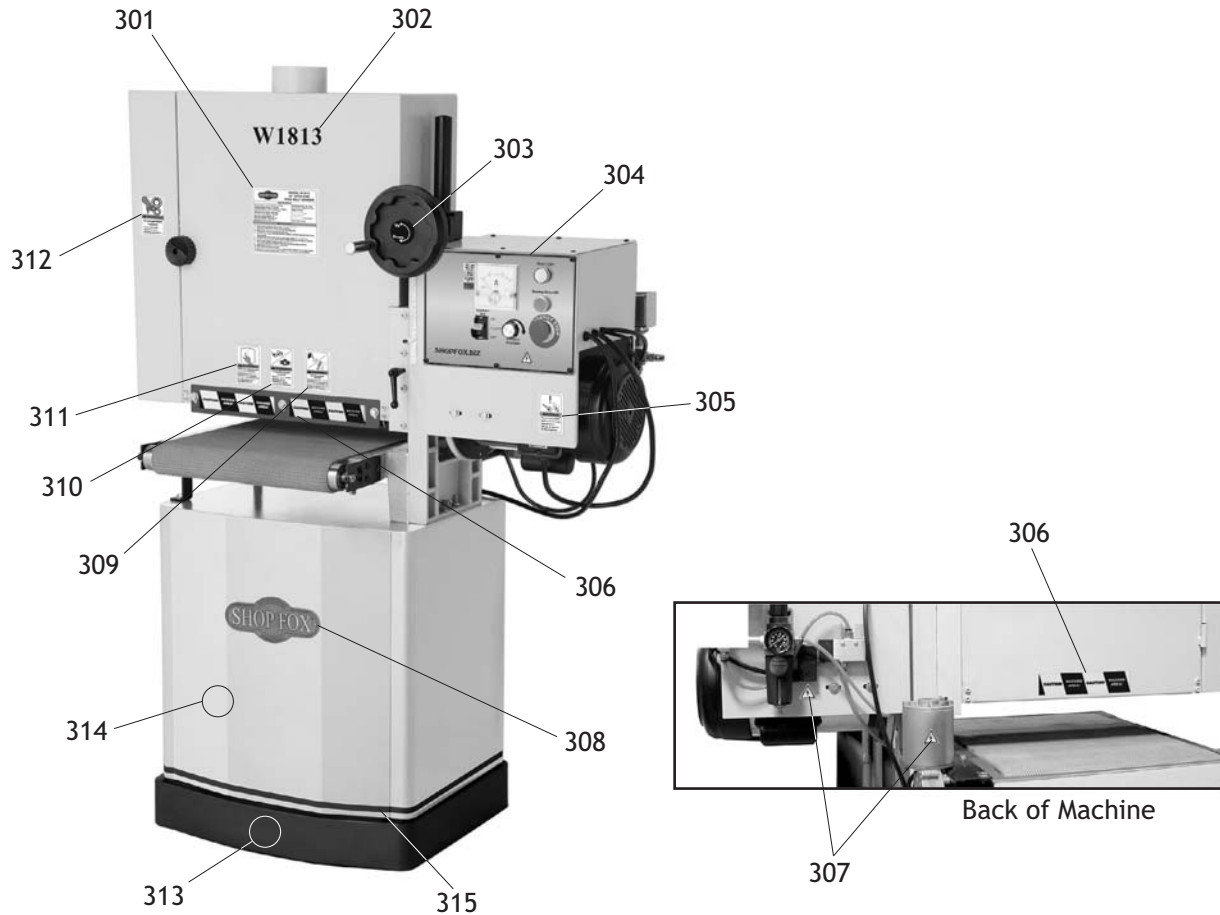
REF	PART #	DESCRIPTION
194	X1813194	CONNECTING TUBE
195	X1813195	4-WAY VALVE
196	X1813196	AIR INLET 1/4 NPT
197	X1813197	CONNECTOR
198	X1813198	AIR PRESSURE SAFETY SWITCH
199	X1813199	AIR PRESSURE BRAKE SOLENOID
200	XPS10	PHLP HD SCR 10-24 x 1-1/2
201	XPLN04	LOCK NUT 10-24
202	X1813202	AIR PLUG
203	X1813203	PNEUMATIC MUFFLER
204	X1813204	SUPPORT ARM
205	XPW01M	FLAT WASHER 8MM
206	X1813206	ELEVATION ROD GUIDE
207	XPLW02	LOCK WASHER 1/4
208	XPSB01	CAP SCREW 1/4-20 X 5/8
209	X1813209	COMPRESSION SPRING
210	XP51106	THRUST BEARING 51106
211	X1813211	LOCK COLLAR
212	X1813212	SANDING BELT ELEVATION ROD
213	X1813213	CRANK LEFT
214	X1813214	CRANK RIGHT
215	XPSS50	SET SCREW 1/4-20 X 2
216	XPW06	FLAT WASHER 1/4
217	X1813217	OSCILLATION VALVE
218	X1813218	COMPRESSION SPRING
219	XPSB21M	CAP SCREW M4-.7 X 30
220	X1813220	PIPE JOINT
221	X1813221	UPPER ROLLER SUPPORT FRAME
222	X1813222	UPPER ROLLER BRACKET
223	X1813223	UPPER ROLLER
224	X1813224	UPPER ROLLER SHAFT
225	X1813225	OSCILLATION SENSOR PLATE
226	X1813226	SUPPORT BRACKET
227	X1813227	SUPPORT PLATE

REF	PART #	DESCRIPTION
228	X1813228	SPECIAL SCREW
229	X1813229	SPACER
230	XP608	BALL BEARING 608ZZ
231	XPW01M	FLAT WASHER 8MM
232	X1813232	BRACKET
233	XPS06M	PHLP HD SCR M5-.8 X 20
234	X1813234	GEAR WASHER 5MM
235	X1813235	OSCILLATION CYLINDER
236	X1813236	PIPE JOINT
237	X1813237	SANDING BELT
238	X1813238	LEVER
239	X1813239	KNOB
240	X1813240	SANDING BELT GUARD
241	X1813241	DEPTH OF CUT SAFETY PLATE
242	X1813242	PRESSURE ROLLER
243	X1813243	PRESSURE ROLLER BUSHING
244	X1813244	PRESSURE ROLLER BRACKET R.
245	X1813245	PRESSURE ROLLER BRACKET L.
246	X1813246	ROLLER SUPPORT BRACKET L.
247	X1813247	ROLLER SUPPORT BRACKET R.
248	XPS76M	PHLP HD SCR M8-1.25 X 12
249	X1813249	COMPRESSION SPRING
250	X1813250	SIDE COVER LOCK KNOB
251	X1813251	SIDE COVER
252	X1813252	HINGE PIN
253	XPB07M	HEX BOLT M8-1.25 X 25
254	X1813254	CABINET
256	X1813256	DOOR
257	X1813257	DOOR LOCK
258	X1813258	CONTACTOR NHD C-090 220V
259	X1813259	OL RELAY NHD NTH-17 14-17A
260	X1813260	STAND FOOT
261	XPNO8	HEX NUT 3/8-16
262	XPW04M	FLAT WASHER 10MM

# Label Placement

## ⚠ WARNING

Safety labels warn about machine hazards and how to prevent machine damage or injury. The owner of this machine **MUST** maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, **REPLACE** that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or [www.shopfoxtools.com](http://www.shopfoxtools.com) to order new labels.



REF	PART #	DESCRIPTION
301	X1813301	MACHINE ID LABEL
302	X1813302	MODEL NUMBER LABEL
303	X1813303	ELEVATION HANDWHEEL LABEL
304	X1813304	CONTROL PANEL LABEL
305	XPLABEL-63	DISCONNECT WARNING LABEL
306	X1813306	HAZARD AREA LABEL
307	XLABEL-04	ELECTRICITY LABEL
308	D3376	SHOP FOX NAMEPLATE-MEDIUM

REF	PART #	DESCRIPTION
309	XPLABEL-55	ENTANGLEMENT HAZARD LABEL
310	XPLABEL-37	EYE/LUNG HAZARD LABEL VERT
311	XPLABEL-12A	READ MANUAL LABEL VERT
312	X1813312	HAND INJURY LABEL VERT
313	XPPAINT-7	SHOPFOX BLACK TOUCH UP PAINT
314	XPPAINT-1	SHOPFOX WHITE TOUCH UP PAINT
315	X1813315	SHOPFOX BLACK STRIPE LABEL



# Warranty Registration

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone # \_\_\_\_\_ Email \_\_\_\_\_ Invoice # \_\_\_\_\_  
 Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Dealer Name \_\_\_\_\_ Purchase Date \_\_\_\_\_

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

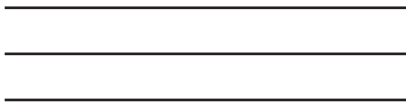
- How did you learn about us?  
 Advertisement       Friend       Local Store  
 Mail Order Catalog       Website       Other:
- How long have you been a woodworker/metalworker?  
 0-2 Years       2-8 Years       8-20 Years       20+ Years
- How many of your machines or tools are Shop Fox?  
 0-2       3-5       6-9       10+
- Do you think your machine represents a good value?       Yes       No
- Would you recommend Shop Fox products to a friend?       Yes       No
- What is your age group?  
 20-29       30-39       40-49  
 50-59       60-69       70+
- What is your annual household income?  
 \$20,000-\$29,000       \$30,000-\$39,000       \$40,000-\$49,000  
 \$50,000-\$59,000       \$60,000-\$69,000       \$70,000+
- Which of the following magazines do you subscribe to?  

<input type="checkbox"/> Cabinet Maker	<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Today's Homeowner
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wood
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Handy	<input type="checkbox"/> Practical Homeowner	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Modeltec	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Shotgun News	

9. Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place  
Stamp  
Here



WOODSTOCK INTERNATIONAL INC.  
P.O. BOX 2309  
BELLINGHAM, WA 98227-2309



FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE



# WARRANTY

Woodstock International, Inc. warrants all Shop Fox machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the Shop Fox machine or machine part, which in normal use has proven to be defective, provided that the original owner returns the product prepaid to a Shop Fox factory service center with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that Shop Fox machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all Shop Fox machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.



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